

Joint Appendix JA1

Appendix JA1 – Glossary

Term	Definition
ACCA	is the Air Conditioning Contractors of America.
ACCA MANUAL J	is the Air Conditioning Contractors of America document entitled “Manual J - Residential Load Calculation, Eighth Edition” (2003).
ACCENT (LIGHT)	is a directional luminaire designed to highlight or spotlight objects. It can be recessed, surface mounted, or mounted to a pendant, stem, or track.
ACCEPTANCE REQUIREMENTS FOR CODE COMPLIANCE	is a description of test procedures in the Reference Nonresidential Appendices that includes equipment and systems to be tested, functions to be tested, conditions under which the test shall be performed, the scope of the tests, results to be obtained, and measurable criteria for acceptable performance.
ACCESSIBLE	is having access thereto, but which first may require removal or opening of access panels, doors, or similar obstructions.
ACM	See <i>Alternative Calculation Method</i> .
ACP	See <i>Alternative Component Package</i> .
ADDITION	is any change to a building that increases conditioned floor area and conditioned volume. Addition is also any change that increases the floor area or volume of an unconditioned building of an occupancy group or type regulated by Part 6. Addition is also any change that increases the illuminated area of an outdoor lighting application regulated by Part 6. See <i>Newly Conditioned Space</i> .
AFUE	See <i>Annual Fuel Utilization Efficiency</i> .
AGRICULTURAL BUILDING	is a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products. It is not a structure that is a place of human habitation, a place of employment where agricultural products are processed, treated or packaged, or a place used by the public.

Term	Definition
<u>AIR BARRIER</u>	<u>is combination of interconnected materials and assemblies joined and sealed together to provide a continuous air-tight boundary of the building envelope separating conditioned from unconditioned space, or adjoining conditioned spaces of different occupancies or uses. Insulation must be in substantial contact with the assembly air barrier on one side for it to perform at its rated R-value.</u> is combination of interconnected materials and assemblies joined and sealed together to provide a continuous air-tight boundary of the building envelope separating conditioned from unconditioned space, or adjoining conditioned spaces of different occupancies or uses. Insulation must be in substantial contact with the assembly air barrier on one side for it to perform at its rated R-value.
<u>AIR LEAKAGE</u>	<u>Is a measures of how much outside air comes into a home or building through a manufactured fenestration or exterior door products. The lower the Air Leakage, the better the fenestration or exterior product is at keeping air out. Air leakage rates typically fall in a range between 0.1 and 0.3 cfm/ft2.</u>
AIR POROSITY	is a measure of the air-tightness of infiltration barriers in units of cubic feet per hour per square foot per inch of mercury pressure difference.
AIRFLOW ACROSS THE EVAPORATOR	is the rate of airflow, usually measured in cfm across a heating or cooling coil. The efficiency of air conditioners and heat pumps is affected by the airflow across the evaporator (or condenser in the case of a heat pump). See <i>Thermostatic Expansion Valves (TXV)</i> .
AIR-TO-AIR HEAT EXCHANGER	is a device which will reduce the heat losses or gains that occur when a building is mechanically ventilated, by transferring heat between the conditioned air being exhausted and outside air being supplied.
ALTERATION	is any change to a building's water-heating system, space-conditioning system, lighting system, or envelope that is not an addition. Alteration is also any change that is regulated by Part 6 to an outdoor lighting system that is not an addition. Alteration is also any change that is regulated by Part 6 to signs located either indoors or outdoors.
ALTERNATIVE CALCULATION METHOD <u>(ACM)'S</u> APPROVAL MANUAL <u>or ACM APPROVAL MANUAL</u>	<u>is the document that specifies the procedures and tests required for approval of Alternative Calculation Methods; establishes the requirements for Energy Commission approval of performance software used to show compliance with the Building Energy Efficiency Standards for Residential and Nonresidential Buildings.</u>

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Term	Definition
<u>ALTERNATIVE CALCULATION METHOD (ACM) REFERENCE MANUAL or ACM REFERENCE MANUAL</u>	contains the specific procedures to implement Sections 140.1 and 150.1 of Title 24, Part 6 of the California Code of Regulations in Compliance Software.
ALTERNATIVE CALCULATION METHODS (ACMS)	are the Commission's Public Domain Computer Programs, one of the Commission's Simplified Calculation Methods, or any other calculation method approved by the Commission. ACMS are also referred to as compliance software.
ALTERED COMPONENT	is a component that has undergone an alteration and is subject to all applicable Standards requirements.
ALTERNATIVE COMPONENT PACKAGE	is one of the sets of low-rise residential prescriptive requirements contained in §151(f). Each package is a set of measures that achieve a level of performance that meets the Standards. These are often referred to as the prescriptive packages or packages. "Buildings that comply with the prescriptive standards shall be designed, constructed and equipped to meet all of the requirements of one of the alternative packages of components shown in Standards Tables 151-B, 151-C and 151-D for the appropriate climate zone..." is a set of building measures whose aggregate calculated energy use is less than or equal to the maximum allowed Energy Budget.
ANNUAL FUEL UTILIZATION EFFICIENCY (AFUE)	is a measure of the percentage of heat from the combustion of gas or oil which is transferred to the space being heated during a year, as determined using the applicable test method in the Appliance Efficiency Regulations or §112.
ANNUNCIATED	is a type of visual signaling device that indicates the on, off, or other status of a load.
ANSI	is the American National Standards Institute.
ANSI C82.6-2005	is the American National Standards Institute document entitled "Ballasts for High-Intensity Discharge Lamps – Methods of Measurement" (ANSI C82.6-2005)
<u>ANSI/IES RP-16-10</u>	is the document co-authored by the American National Standards Institute and the Illuminating Engineering Society of North America, Recommended Practice entitled "Nomenclature and Definitions for Illuminating Engineering" (Supersedes ANSI/IES RP-16-05) Includes ANSI/IES Addenda listed in Annex B, 2010 (ANSI/IES RP-16-10)
ANSI Z21.10.3	is the American National Standards Institute document entitled "Gas Water Heaters, Volume I, Storage Water Heaters with input ratings above 75,000 Btu per hour," 2001 (ANSI Z21.10.3-2001).
ANSI Z21.13	is the American National Standards Institute document entitled "Gas-Fired Low Pressure Steam and Hot Water Boilers," 2000 (ANSI Z21.13-2000).

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ANSI Z21.40.4	is the American National Standards Institute document entitled "Performance Testing and Rating of Gas-Fired, Air Conditioning and Heat Pump Appliances," 1996 (ANSI Z21.40.4-1996).
ANSI Z21.47	is the American National Standards Institute document entitled "Gas-Fired Central Furnaces," 2001 (ANSI Z21.47-2001).
ANSI Z83.8	is the American National Standards Institute document entitled "Gas Unit Heaters and Gas-Fired Duct Furnaces," 2002 (ANSI Z83.8 -2002).
APPLIANCE EFFICIENCY REGULATIONS	are the regulations in Title 20, Section 1601 et seq. of the California Code of Regulations.
APPLIANCE STANDARDS	are the Standards contained in the Appliance Efficiency Regulations.
APPROVED	as to a home energy rating provider or home energy rating system, is reviewed and approved by the Commission under Title 20, Section 1675 of the California Code of Regulations.
APPROVED BY THE COMMISSION	means approval under Section 25402.1 of the Public Resources Code.
APPROVED CALCULATION METHOD	<u>See Alternative Calculation Methods: is compliance software, or alternative component packages, or exceptional methods approved under Section 10-109</u>
AREAL HEAT CAPACITY	See <i>Heat Capacity</i> .
AHRI	is the Air- <u>C</u> onditioning, <u>H</u> eating, and Refrigeration Institute.
AHRI 210/240	is the Air- <u>e</u> Conditioning, <u>H</u> eating, and Refrigeration Institute document entitled "Unitary Air-Conditioning and Air-Source Heat Pump Equipment," 2003 (ARI 210/240-2003).
AHRI 310/380	is the Air- <u>C</u> onditioning, <u>H</u> eating, and Refrigeration Institute document entitled "Packaged Terminal Air-Conditioners and Heat Pumps," 1993 (ARI 310/380-93).
AHRI 320	is the Air- <u>C</u> onditioning, <u>H</u> eating, and Refrigeration Institute document entitled "Water-Source Heat Pumps," 1998 (ARI 320-98).
AHRI 325	is the Air- <u>C</u> onditioning, <u>H</u> eating, and Refrigeration Institute document entitled "Ground Water-Source Heat Pumps," 1998 (ARI 325-98).
AHRI 340/360	is the Air- <u>e</u> Conditioning, <u>H</u> eating and Refrigeration Institute document entitled "Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment," 2000 (ARI 340/360-2000).
AHRI 365	is the Air- <u>C</u> onditioning, <u>H</u> eating and Refrigeration Institute document entitled, "Commercial and Industrial Unitary Air-Conditioning Condensing Units," 2002 (ARI 365-2002).

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<u>AHRI 460</u>	is the Air- C eonditioning, <u>Heating</u> , and Refrigeration Institute document entitled "Remote Mechanical-Draft Air-Cooled Refrigerant Condensers," 2000 (ARI 460-2000).
<u>AHRI 550/590</u>	is the Air- e Conditioning, <u>Heating</u> , and Refrigeration Institute document entitled "Standard for Water Chilling Packages Using the Vapor Compression Cycle," 1998 (ARI 550/590-98).
<u>AHRI 560</u>	is the Air- C eonditioning, <u>Heating</u> , and Refrigeration Institute document entitled "Absorption Water Chilling and Water Heating Packages," 2000 (ARI 560-2000).
<u>AHRI 680</u>	<u>is the Air-Conditioning, Heating, and Refrigeration Institute document entitled "Performance Rating of Residential Air Filter Equipment," 2009 (ANSI/AHRI Standard 680).</u>
ASHRAE	is the American Society of Heating, Refrigerating, and Air-conditioning Engineers.
ASHRAE CLIMATIC DATA FOR REGION X	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "ASHRAE Climatic Data for Region X, Arizona, California, Hawaii and Nevada," Publication SPCDX, 1982 and "Supplement," 1994.
ASHRAE HANDBOOK, APPLICATIONS VOLUME	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "ASHRAE Handbook: Heating, Ventilating, and Air-Conditioning Applications" (2003).
ASHRAE HANDBOOK, EQUIPMENT VOLUME	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "ASHRAE Handbook: Heating, Ventilating, and Air-Conditioning Systems and Equipment" (2000).
ASHRAE HANDBOOK, FUNDAMENTALS VOLUME	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "ASHRAE Handbook: Fundamentals" (2001).
<u>ASHRAE STANDARD 52.2</u>	<u>is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size," 2007 (ANSI/ASHRAE Standard 52.2-2007 including ANSI/ASHRAE Addendum b to ANSI/ASHRAE Standard 52.2-2007).</u>
ASHRAE STANDARD 55	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "Thermal Environmental Conditions for Human Occupancy," 2004 (ASHRAE Standard 55-2004).

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ASHRAE STANDARD 62.2	is the American Society of Heating, Refrigerating and Air-Conditioning Engineers document entitled "Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings," 2010 (ANSI/ASHRAE Standard 62.2-2010 including ANSI/ASHRAE Addenda b, c, e, g, h, i and l to ANSI/ASHRAE 62.2-2010 published in the 2011 supplement. 2007 (ASHRAE Standard 62.2-2007).
ASME	is the American Society of Mechanical Engineers.
ASTM	is the American Society for Testing and Materials.
ASTM C1167	is the American Society for Testing and Materials document entitled "Standard Specification for Clay Roof Tiles," 1996 (ASTM C1167-96).
ASTM C1371	is the American Society for Testing and Materials document entitled "Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers," 1998 (ASTM C1371-98).
ASTM C1583	is the American Society of Testing and Materials document entitled, "Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)," 2004 (ASTM C1583-04).
ASTM C177	is the American Society for Testing and Materials document entitled "Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus," 1997 (ASTM C177-97).
ASTM C272	is the American Society for Testing and Materials document entitled "Standard Test Method for Water Absorption of Core Materials for Structural Sandwich Constructions," 2001 (ASTM C272-01).
ASTM C335	is the American Society for Testing and Materials document entitled "Standard Test Method for Steady-State Heat Transfer Properties of Horizontal Pipe Insulation," 1995 (ASTM C335-95).
ASTM C518	is the American Society for Testing and Materials document entitled "Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus," 2002 (ASTM C518-02).
ASTM C55	is the American Society for Testing and Materials document entitled "Standard Specification for Concrete Brick," 2001 (ASTM C55-01).
ASTM C731	is the American Society for Testing and Materials document entitled "Standard Test Method for Extrudability, After Package Aging of Latex Sealants," 2000 (ASTM C731-00).

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<i>ASTM C732</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Aging Effects of Artificial Weathering on Latex Sealants," 2001 (ASTM C732-01).
<i>ASTM C836</i>	is the American Society of Testing and Materials document entitled, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course," 2005 (ASTM C836-05).
<i>ASTM D1003</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics," 2000 (ANSI/ASTM D1003-00).
<i>ASTM D1653</i>	is the American Society of Testing and Materials document entitled, "Standard Test Methods for Water Vapor Transmission of Organic Coating Films," 2003 (ASTM D1653-03).
<i>ASTM D2370</i>	is the American Society of Testing and Materials document entitled, "Standard Test Method for Tensile Properties of Organic Coatings," 2002 [ASTM D2370-98 (2002)].
<i>ASTM D2824</i>	is the American Society of Testing and Materials document entitled "Standard Specification for Aluminum-Pigmented Asphalt Roof Coatings, Nonfibered, Asbestos Fibered, and Fibered without Asbestos," 2002 (ASTM D2824-02).
<i>ASTM D3468</i>	is the American Society of Testing and Materials document entitled, "Standard Specification for Liquid-Applied Neoprene and Chlorosulfonated Polyethylene Used in Roofing and Waterproofing," 1999 (ASTM D3468-99).
<i>ASTM D3805</i>	is the American Society of Testing and Materials document entitled "Standard Guide for Application of Aluminum-Pigmented Asphalt Roof Coatings," 1997 (ASTM D3805-97 (reapproved 2003)).
<i>ASTM D4798</i>	is the American Society for Testing and Materials document entitled "Standard Test Method for Accelerated Weathering Test Conditions and Procedures for Bituminous Materials (Xenon-Arc Method)," 2001 (ASTM D4798-01).
<i>ASTM D522</i>	is the American Society of Testing and Materials document entitled, "Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings," 2001 [ASTM D522-93a (2001)].
<i>ASTM D822</i>	is the American Society of Testing and Materials document entitled, "Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings," 2001 [ASTM D522-93a (2001)].

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ASTM D5870	is the American Society of Testing and Materials document entitled, "Standard Practice for Calculating Property Retention Index of Plastics," 2003 [ASTM D5870-95 (2003)].
ASTM D6083	is the American Society of Testing and Materials document entitled, "Standard Specification for Liquid Applied Acrylic Coating Used in Roofing," 2005 (ASTM D6083-05e1).
ASTM D6694	is the American Society of Testing and Materials document entitled, "Standard Specification for Liquid-Applied Silicone Coating Used in Spray Polyurethane Foam Roofing," 2001 (ASTM D6694-01).
ASTM D6848	is the American Society of Testing and Materials document entitled "Standard Specification for Aluminum-Pigmented Emulsified Asphalt Used as a Protective Coating for Roofing," 2002 (ASTM D6848-02).
ASTM D822	is the American Society of Testing and Materials document entitled, "Standard Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings," 2001 (ASTM D822-01).
ASTM E96	is the American Society for Testing and Materials document entitled "Standard Test Methods for Water Vapor Transmission of Materials," 200 (ASTM E96-00).
ASTM E283	is the American Society for Testing and Materials document entitled "Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen," 1991 (ASTM E283-91(1999)).
ASTM E408	is the American Society for Testing and Materials document entitled, "Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques," 1971 (ASTM E408-71(2002)).
ASTM E96	is the American Society for Testing and Materials document entitled "Standard Test Methods for Water Vapor Transmission of Materials," 200 (ASTM E96-00).
<u>ASTM E972</u>	<u>is the American Society for Testing and Materials document entitled, "Standard Test Method for Solar Photometric Transmittance of Sheet Materials Using Sunlight," 1996 (ASTM E972-96(2007)).</u>
<u>ASTM E2178-03</u>	<u>is the American Society for Testing and Materials document entitled, "Standards Test Method for Air Permeance of Building Materials.</u>
<u>ASTM E2357-05</u>	<u>is the American Society for Testing and Materials document entitled, "Standard Test Method for determining air leakage of air barrier assemblies.</u>

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Term	Definition
ATRIUM	is a large-volume space created by openings connecting two or more stories and is used for purposes other than an enclosed stairway, an elevator hoist way, an escalator opening, or as a utility shaft for plumbing, electrical, air-conditioning or other equipment, and is not a mall.
ATTIC	is an enclosed unconditioned space directly below the roof <u>deck</u> and above the ceiling <u>beams</u> .
AUDITORIUM	See <i>Nonresidential Functional Area or Type of Use</i> .
AUTO REPAIR	See <i>Nonresidential Functional Area or Type of Use</i> .
AUTOMATED TELLER MACHINE (ATM)	is any electronic information processing device which accepts or dispenses currency in connection with a credit, deposit, or convenience account without involvement by a clerk.
AUTOMATIC	is capable of operating without human intervention.
AUTOMATIC MULTI-LEVEL DAYLIGHTING CONTROL	is a multi-level lighting control that automatically reduces lighting in multiple steps or continuous dimming in response to available daylight. This control uses one or more photosensors to detect changes in daylight illumination and then change the electric lighting level in response to the daylight changes.
AUTOMATIC TIME SWITCH CONTROL DEVICES	are devices capable of automatically turning loads off and on based on time schedules.
BACK	is the back side of the building as one faces the front façade from the outside (see Front). This designation is used on the Certificate of Compliance (CF-1R form) to indicate the orientation of fenestration (e.g., Back-West).
BATHROOM	See <i>Residential Space Type</i>.
BELOW-GRADE WALL	is the portion of a wall, enclosing conditioned space that is below the grade line.
BRITISH THERMAL UNIT (BTU)	is the amount of heat needed to raise the temperature of one pound of water one degree Fahrenheit.
BTU/H	is the amount of heat in Btu that is removed or added during one hour. Used for measuring heating and cooling equipment output.
<u>BUBBLE POINT</u>	<u>is the refrigerant liquid saturation temperature at a specified pressure.</u>
BUILDER	is the general contractor responsible for construction
BUILDING	is any structure or space covered by Section 100.0 of the Building Energy Efficiency Standards.
<u>BUILDING COMMISSIONING</u>	<u>is a systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.</u>

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Term	Definition
ENFORCEMENT AGENCY	is the city, county or state agency responsible for approving the plans, issuing a building permit and approving occupancy of the dwelling unit.
BUILDING ENERGY EFFICIENCY STANDARDS	are the California Building Energy Efficiency Standards as set forth in the California Code of Regulations, Title 24, Part 6. Also known as the <i>California Energy Code</i> .
BUILDING ENTRANCE	See <i>Outdoor Lighting</i> .
BUILDING ENVELOPE	is the ensemble of exterior and demising partitions of a building that enclose conditioned space.
BUILDING FAÇADE	See <i>Outdoor Lighting</i> .
BUILDING LOCATION DATA	is the specific outdoor design temperatures shown in Reference Joint Appendix JA2 used in calculating heating and cooling loads for the particular location of the building.
BUILDING OWNER	is the owner of the building or dwelling unit.
BUILDING PERMIT	is an electrical, plumbing, mechanical, building, or other permit or approval, that is issued by an enforcement agency, and that authorizes any construction that is subject to Part 6.
BUILDING TYPES	is the classification of buildings defined by the CBC and applicable to the requirements of the <i>Building Energy Efficiency Standards</i> .
CABINET SIGN	See <i>Sign</i> .
CALIFORNIA ELECTRICAL CODE	is the 2007 California Electrical Code.
CALIFORNIA ENERGY CODE	See <i>Building Energy Efficiency Standards</i> .
CALL CENTER	is a phone center that handles large number of phone calls including but not limited to help desk, customer and sales support, technical support, emergency response, telephone answering service, and inbound and outbound telemarketing.
CANOPY	See <i>Outdoor Lighting</i> .
CAPTIVE-KEY-OVERRIDE	is a type of lighting control in which the key that activates the override cannot be released when the lights are in the on position.
CBC	is the 2007 California Building Code.
CEILING	is the interior upper surface of a space separating it from an attic, plenum, indirectly or directly conditioned space or the roof assembly, which has a slope less than 60 degrees from horizontal.
CENTER OF GLASS U-FACTOR	is the U-factor for the glass portion only of vertical or horizontal fenestration and is measured at least two and one half inches from the frame. Center of glass U-factor does not consider the U-factor of the frame. Center of glass U-factor is not used in Title 24 compliance.

Term	Definition
CENTRAL FAN-INTEGRATED VENTILATION SYSTEM	is a central forced air heating and/or cooling system which is intended to operate on a regular basis to bring in outdoor ventilation air and/or distribute air around the home for comfort and ventilation even when heating and cooling are not needed.
CERTIFICATE OF COMPLIANCE	is a document with information required by the Commission that is prepared by the Documentation Author that indicates whether the building includes measures that require field verification and diagnostic testing.
CERTIFICATE OF FIELD VERIFICATION AND DIAGNOSTIC TESTING	is a document with information required by the Commission that is prepared by the HERS Rater to certify that measures requiring field verification and diagnostic testing comply with the requirements.
CERTIFICATION	<p>is certification by the manufacturer to the Commission, as specified the Appliance Efficiency Regulations, that the appliance complies with the applicable standard for that appliance.</p> <p>The Commission's database of certified heating appliances can be accessed by contacting the Commission Energy Hotline or from the Commission's website at http://www.energy.ca.gov/appliances/database/</p> <p>The term certification is also used in other ways in the standards. Many of the compliance forms are certificates, whereby installers, HERS testers and others certify that equipment was correctly installed and/or tested.</p>
CERTIFIED	as to a home energy rater, is having been found by a certified home energy rating provider to have successfully completed the requirements established by that home energy rating provider.
CERTIFIED TO THE ENERGY COMMISSION	<u>means certified to the California Energy Commission pursuant to the provisions of Section 1606 of Title 20 of the California Code of Regulations.</u>
CERTIFYING ORGANIZATION	is an independent organization recognized by the Commission to certify manufactured devices for performance values in accordance with procedures adopted by the Commission.
CHANDELIER	is a ceiling-mounted, close-to-ceiling, or suspended decorative luminaire that uses glass, crystal, ornamental metals, or other decorative material and that typically is used in hotel/motels, restaurants, or churches as a significant element in the interior architecture
CHANNEL LETTER SIGN	See <i>Sign</i>
CIVIC MEETING SPACE	See <i>Nonresidential Functional Area or Type of Use.</i>
CLASSROOM, LECTURE, TRAINING, VOCATIONAL ROOM	See <i>Nonresidential Functional Area or Type of Use.</i>

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Term	Definition
CLIMATE ZONES	are the 16 geographic areas of California for which the Commission has established typical weather data, prescriptive packages and energy budgets. <u>Climate zones are defined by ZIP code and referenced in Joint Appendix JA2. Climate zone boundary descriptions are in the document "California Climate Zone Descriptions" (July 1995), incorporated herein by reference.</u> FIGURE 100.1-A in the Building Energy Efficiency Standards is an approximate map of the 16 climate zones.
CLOSED-CIRCUIT COOLING TOWER	is a closed-circuit cooling tower that utilizes indirect contact between a heated fluid, typically water or glycol, and the cooling atmosphere to transfer the source heat load indirectly to the air, essentially combining a heat exchanger and cooling tower into one relatively compact device.
CLTD	is the Cooling Load Temperature Difference.
CMC	is the 2007 California Mechanical Code.
CODEC, CEC	is the 2007 California Electric Code.
CODES, CALIFORNIA HISTORICAL BUILDING CODE	is the California Historical Building Code, California Code of Regulations, Title 24, Part 8 and Part 2 (Chapter 34).
CODES, CBC	is the 2007 California Building Code.
CODES, CEC	is the 2007 California Electric Code.
CODES, CMC	is the 2007 California Mechanical Code.
COEFFICIENT OF PERFORMANCE (COP), COOLING	is the ratio of the rate of net heat removal to the rate of total energy input, calculated under designated operating conditions and expressed in consistent units, as determined using the applicable test method in the Appliance Efficiency Regulations or §112.
COEFFICIENT OF PERFORMANCE (COP), HEAT PUMP	is the ratio of the rate of useful heat output delivered by the complete heat pump unit (exclusive of supplementary heating) to the corresponding rate of energy input, in consistent units and as determined using the applicable test method in Appliance Efficiency Regulations or §112.
COEFFICIENT OF PERFORMANCE (COP), HEATING	is the ratio of the rate of useful heat output delivered by the complete heat pump unit (exclusive of supplementary heating) to the corresponding rate of energy input, in consistent units, and as determined using the applicable test method in the Appliance Efficiency Regulations or §112.
COMBINATION SPACE-HEATING AND WATER-HEATING APPLIANCE	is an appliance that is designed to provide both space heating and water heating from a single primary energy source.

Term	Definition
COMBINED HYDRONIC SPACE/WATER HEATING SYSTEM	is a system which both domestic hot water and space heating is supplied from the same water heating equipment. Combined hydronic space heating may include both radiant floor systems and convective or fan coil systems.
COMBUSTION EFFICIENCY	is a measure of the percentage of heat from the combustion of gas or oil that is transferred to the medium being heated or lost as jacket loss.
COMMISSION	is the California State Energy Resources Conservation and Development Commission.
COMPLETE BUILDING	See <i>Entire Building</i> .
<u>COMPLEX MECHANICAL SYSTEMS</u>	<u>are systems that include 1) fan systems each serving multiple thermostatically controlled zones, or 2) built-up air handler systems (non-unitary or non-packaged HVAC equipment), or 3) hydronic or steam heating systems, or 4) hydronic cooling systems. Complex systems are NOT the following: unitary or packaged equipment listed in Tables 110.2-A, 110.2-B, 110.2-C, and 110.2-E that each serve one zone or two-pipe, heating only systems serving one or more zones.</u>
COMPLIANCE APPROACH	is any one of the allowable methods by which the design and construction of a building may be demonstrated to be in compliance with Part 6. The compliance approaches are the performance compliance approach and the prescriptive compliance approach. The requirements for each compliance approach are set forth in §100.0(e)2Dii.
COMPLIANCE DOCUMENTATION	are the set of forms and other data prepared in order to demonstrate to the building official that a building complies with the Standards. The compliance forms for the residential and nonresidential standards are contained in the Residential Compliance Manual and the Nonresidential Compliance Manual.
<u>COMPLIANCE OPTION</u>	<u>is a method or procedure for demonstrating compliance with Title 24, Part 6 and Part 11, Division 4.2 and 5.2 of the California Code of Regulations through modifications of approved calculation methods.</u>
<u>COMPLIANCE SOFTWARE</u>	<u>is used to demonstrate compliance with the performance approach to the California Energy Efficiency Standards. The compliance software must meet the requirements for certification described in the Alternative Calculation Method Manual.</u>
COMPONENT METHOD <u>APPROACH</u>	This certification program rates whole fenestration products in accordance with NFRC 100. In order to accomplish this, the three (3) components that make up a fenestration product shall have values that are NFRC-approved and maintained in the NFRC Approved Component Library Database.

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Term	Definition
<u>COMPUTER ROOM</u>	<u>is a room whose primary function is to house electronic equipment and that has a design equipment power density exceeding 20 watts/ft² of conditioned floor area (215 watts/m²).</u>
<u>CONDENSER SPECIFIC EFFICIENCY</u>	<u>is the Total Heat of Rejection (THR) capacity divided by the fan input electric power at 100% fan speed (including spray pump electric input power for evaporative condensers).</u>
CONDITIONED FLOOR AREA (CFA)	is the floor area in square feet (ft ²) of enclosed conditioned space on all floors of a building, as measured at the floor level of the exterior surfaces of exterior walls enclosing the conditioned space.
CONDITIONED FOOTPRINT	is a projection of all conditioned space on all floors to a vertical plane. The conditioned footprint area may be equal to the first floor area, or it may be greater, if upper floors project over lower floors. One way to think of the conditioned footprint area is as the area of the largest conditioned floor in the building plus the conditioned floor area of any projections from other stories that extend beyond the outline of that largest floor.
CONDITIONED SPACE	is space in a building that is either directly conditioned or indirectly conditioned.
CONDITIONED SPACE, DIRECTLY	is an enclosed space that is provided with wood heating, is provided with mechanical heating that has a capacity exceeding 10 Btu/hr-ft ² , or is provided with mechanical cooling that has a capacity exceeding 5 Btu/hr-ft ² ; unless the space conditioning system is designed for a process space. (See "Process space")
CONDITIONED SPACE, INDIRECTLY	is enclosed space, including, but not limited to, unconditioned volume in atria, that (1) is not directly conditioned space; and (2) either (a) has a thermal transmittance area product (UA) to directly conditioned space exceeding that to the outdoors or to unconditioned space and does not have fixed vents or openings to the outdoors or to unconditioned space, or (b) is a space through which air from directly conditioned spaces is transferred at a rate exceeding three air changes per hour.
CONDITIONED VOLUME	is the total volume in cubic feet (ft ³) of the conditioned space within a building.
CONSTRUCTION LAYERS	are roof, wall and floor constructions which represent an assembly of layers. Some layers are homogeneous, such as gypsum board and plywood sheathing, while other layers are non-homogeneous such as the combination of wood framing and cavity insulation typical in many buildings.
<u>CONTINUOUS AIR BARRIER</u>	<u>See <i>Air Barrier</i></u>
CONTINUOUS DIMMING	See <i>Dimming, Continuous</i> .

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Term	Definition
<u>CONTINUOUS INSULATION</u>	<u>Exterior or interior insulation of board or sheet material that is continuous across all structural or nonstructural framing assemblies separating conditioned from unconditioned space without thermal bridges other than fasteners and necessary building penetrations.</u>
<u>CONTROLLED ATMOSPHERE</u>	<u>is an airtight space maintained at reduced oxygen levels for the purpose of reducing respiration of perishable product in long term storage.</u>
CONTROLLED VENTILATION CRAWL SPACE (CVC)	is a crawl space in a residential building where the side walls of the crawlspace are insulated rather than the floor above the crawlspace. A CVC has automatically controlled crawl space vents. Credit for a CVC is permitted for low-rise residential buildings that use the performance approach to compliance.
CONVENTION CENTERS	See <i>Nonresidential Functional Area or Type of Use</i> .
COOL ROOF	is a roofing material with high thermal emitt a ance and high solar reflectance, or low thermal emittance and exceptionally high solar reflectance as specified in §110.8(i) that reduces heat gain through the roof.
COOL ROOF RATING COUNCIL (CRRC)	is a not-for-profit organization designated by the Commission as the Supervisory Entity with responsibility to rate and label the reflectance and emittance of roof products.
COOLING COIL AIRFLOW	Is the air flow through the evaporator (indoor) coil of a direct expansion air conditioning unit in cooling mode. The air flow is expressed in cubic feet per minute (CFM) or liter per second (L/S) of standard air (standard air has a density of 0.075 lb/ft ³).
COOLING EQUIPMENT	is equipment used to provide mechanical cooling for a room or rooms in a building.
COOLING LOAD	is the rate at which heat must be extracted from a space to maintain a desired room condition.
COOLING LOAD TEMPERATURE DIFFERENCE (CLTD)	is an equivalent temperature difference used for calculating the instantaneous external cooling loads across a wall or roof. The cooling load is the CLTD x U-factor x Area.
COP	See <i>Coefficient of Performance</i> .
CORRIDOR	See <i>Nonresidential Functional Area or Type of Use</i> .
COURTYARD	is an open space through one or more floor levels surrounded by walls within a building.
CRAWL SPACE	is a space immediately under the first floor of a building adjacent to grade.
CRRC	See <i>Cool Roof Rating Council</i> .
CRRC-1	is the Cool Roof Rating Council document entitled "Product Rating Program Manual." (2002)
CTI	is the Cooling Technology Institute.

Term	Definition
CTI ATC-105	is the Cooling Technology Institute document entitled "Acceptance Test Code for Water Cooling Towers," 2000 (CTI ATC-105-00).
<u>CTI ATC-105S(96)</u>	<u>is the Cooling Technology Institute document entitled "Acceptance Test Code for Closed-Circuit Cooling Towers," 1996 (CTI ATC-105-96).</u>
CTI STD-201	is the Cooling Technology Institute document entitled "Standard for the Certification of Water-Cooling Tower Thermal Performance," 2004 (CTI STD-201-04).
<u>CURTAIN WALL</u>	<u>is an external nonbearing wall intended to separate the exterior and interior environments, which may consist entirely (or principally) of a combination of framing materials, glass and glazing, opaque in-fill and other surfacing materials supported by (or within) a framework.</u>
<u>CURRENT AIR DEMAND</u>	<u>is a measurement of total airflow, measured in actual cubic feet of air per minute (acfm), necessary for end uses in a compressed air system.</u>
CUSTOM ENERGY BUDGET	See <i>Energy Budget</i> .
C-VALUE (ALSO KNOWN AS C-FACTOR)	is the time rate of heat flow through unit area of a body induced by a unit temperature difference between the body surfaces, in Btu (hr. x ft. ² x °F). It is not the same as K-value or K-factor.
<u>DAYLIGHT AREA</u> <u>DAYLIT ZONE</u>	is the floor area under skylights or next to windows. The <u>Daylit Zonedaylight area</u> includes Primary Sidelit <u>Daylit ZoneDaylight Area</u> , Secondary Sidelit <u>-Daylit ZoneDaylight Area</u> , and Skylit <u>-Daylit ZoneDaylight Area</u> .
<u>DATA REGISTRY</u>	<p><u>is a web service with a user interface and database maintained by a Registration Provider that provides for registration of residential or nonresidential compliance documentation used for demonstrating compliance with Part 6. Data registries shall conform to the requirements specified in Reference Joint Appendix JA7 and the Commission-approved Data Registry Requirements Manual.</u></p> <p><u>RESIDENTIAL DATA REGISTRY is a HERS provider data registry approved by the Energy Commission.</u></p> <p><u>NONRESIDENTIAL DATA REGISTRY is a HERS provider data registry approved by the Energy Commission, or a data registry approved by the Executive Director.</u></p>

Term	Definition
<u>DATA REGISTRY REQUIREMENTS MANUAL</u>	<u>is a document that provides additional detail specification for data registry requirements necessary to supplement the requirements in Reference Joint Appendix JA7. The Data Registry Requirements Reference Manual may be approved by the Energy Commission. Corrections, clarifications, revisions and addendums to the Registry Requirements Reference Manual may be approved by the Executive Director.</u>
DEADBAND	is the temperature range within which the HVAC system is neither calling for heating or cooling.
DECORATIVE GAS APPLIANCE	is a gas appliance that is designed or installed for visual effect only, cannot burn solid wood, and simulates a fire in a fireplace.
DEGREE DAY, HEATING	is a unit, based upon temperature difference and time, used in estimating fuel consumption and specifying nominal annual heating load of a building. For any one day, when the mean temperature is less than 65°F, there exist as many degree days as there are Fahrenheit degrees difference in temperature between the mean temperature for the day and 65°F. The number of degree days for specific geographical locations are those listed in the Reference Joint Appendix JA2. For those localities not listed in the Reference Joint Appendix JA2, the number of degree days is as determined by the applicable enforcing agency.
DEMAND RESPONSE	<u>is short-term changes in electric usage by end-use customers from their normal consumption patterns in response to changes in the price of electricity over time, or to incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.</u> is controlling electricity loads in buildings in response to an electronic signal sent by the local utility requesting their customers to reduce electricity consumption.
DEMAND RESPONSE PERIOD	is a period of time during which the local utility is curtailing electricity loads <u>are curtailed in response to by sending out</u> a demand response signal.
DEMAND RESPONSE SIGNAL	<u>is a signal sent by the local utility, Independent System Operator (ISO), or their designated curtailment service provider or aggregator indicating a price or a request to a customer to curtail electricity consumption for a limited time period.</u> is an electronic signal sent out by the local utility indicating a request to their customers to curtail electricity consumption.
DEMAND RESPONSIVE LIGHTING CONTROL	is a control that reduces lighting power consumption in response to a demand response signal.
<u>DEMAND RESPONSIVE CONTROL</u>	<u>is a control that is capable of receiving and automatically responding to a demand response signal sent via a third-party network or device.</u>

Term	Definition
DEMISING PARTITION	is a wall, fenestration, floor, or ceiling that separates conditioned space from enclosed unconditioned space.
DEMISING WALL	is a wall that is a demising partition.
DENSITY	is the mass per unit volume of a construction material as documented in an ASHRAE handbook, a comparably reliable reference or manufacturer's literature.
DEPLETABLE SOURCES	is energy obtained from electricity purchased from a public utility, or energy obtained from burning coal, oil, natural gas, or liquefied petroleum gases.
DESIGN CONDITIONS	are the parameters and conditions used to determine the performance requirements of space-conditioning systems. Design conditions for determining design heating and cooling loads are specified in §140.4(b) for nonresidential, high-rise residential, and hotel/motel buildings and in §150.0(h) for low-rise residential buildings.
DESIGN HEAT GAIN RATE	is the total calculated heat gain through the building envelope under design conditions.
DESIGN HEAT LOSS RATE	is the total calculated heat loss through the building envelope under design conditions.
<u>DESIGN REVIEW</u>	<u>is defined as a secondary review of the construction documents (drawings and specifications) that seeks to improve compliance with existing Title 24 regulations, encourage adoption of best practices in design, and encourage designs that are constructable and maintainable. It is an opportunity for an experienced design engineer to look at a project with a fresh perspective in an effort to catch missing or unclear design information and to suggest design enhancements.</u>
DIMMING, CONTINUOUS	is a lighting control method that is capable of varying the light output of lamps over a continuous range from full light output to minimum light output.
DIMMING, STEPPED	is a lighting control method that varies the light output of lamps in one or more predetermined discrete steps between full light output and off.
<u>DEW POINT</u>	<u>is the refrigerant vapor saturation temperature at a specified pressure.</u>
DINING	See <i>Nonresidential Functional Area or Type of Use</i> .
DIRECT DIGITAL CONTROL (DDC)	is a type of control where controlled and monitored analog or binary data, such as temperature and contact closures, are converted to digital format for manipulation and calculations by a digital computer or microprocessor, then converted back to analog or binary form to control mechanical devices.

Term	Definition
<i>DIRECTLY CONDITIONED SPACE</i>	is an enclosed space that is provided with wood heating, is provided with mechanical heating that has a capacity exceeding 10 Btu/(hr.xft. ²), or is provided with mechanical cooling that has a capacity exceeding 5 Btu/(hr.xft. ²), unless the space-conditioning system is designed and thermostatically controlled to maintain a process environment temperature less than 55°F or to maintain a process environment temperature greater than 90°F for the whole space that the system serves, or unless the space-conditioning system is designed and controlled to be incapable of operating at temperatures above 55°F or incapable of operating at temperatures below 90°F at design conditions.
DISPLAY LIGHTING	is lighting confined to the area of a display that provides a higher level of illuminance than the level of surrounding ambient illuminance.
<i>DISPLAY PERIMETER</i>	is the length of an exterior wall in a Group B; Group F, Division 1; or Group M Occupancy that immediately abuts a public sidewalk, measured at the sidewalk level for each story that abuts a public sidewalk.
<i>DIVIDERS</i>	are wood, aluminum or vinyl glazing dividers including mullions, muntins, munnions and grilles. Dividers may truly divide lights, be between the panes, or be applied to the exterior or interior of the glazing.
<i>DOCUMENTATION AUTHOR</i>	is the person completing the compliance documentation that demonstrates whether a building complies with the Standards. Compliance documentation requirements are defined in the Residential Compliance Manual. DOCUMENTATION AUTHOR is the person who prepares a Title 24 Part 6 compliance document (Certificate of Compliance, Installation Certificate, Certificate of Acceptance, or Certificate of Field Verification and Diagnostic Testing). A documentation author is not required to be eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design and/or construction, and is not required to be a certified HERS rater. A documentation author who is not eligible under the applicable section(s) of Division 3 of the Business and Professions Code shall not accept responsibility for the building design on Certificate of Compliance documentation. A documentation author who is not eligible under the applicable section(s) of Division 3 of the Business and Professions Code shall not accept responsibility for the building construction or installation on Installation Certificate, or Certificate of Acceptance documentation. A documentation author who is not a certified HERS Rater shall not accept responsibility for Field Verification and Diagnostic Testing documentation.

Term	Definition
<i>DOMINANT OCCUPANCY</i>	is the occupancy type in mixed occupancy buildings with the greatest percentage of total conditioned floor area.
<i>DOOR</i>	is an operable opening in the building envelope that is not a fenestration product <u>component</u> , including swinging and roll-up doors, fire doors, and access hatches. Doors that are more than one-half glass in area are considered a fenestration product. <u>glazed door.</u>
<u><i>DOOR, GLAZED</i></u>	<u>Doors that are more than one-half glass in area are considered a glazed door.</u>
<i>DORMITORY</i>	is a building consisting of multiple sleeping quarters and having interior common areas such as dining rooms, reading rooms, exercise rooms, toilet rooms, study rooms, hallways, lobbies, corridors, and stairwells, other than high-rise residential, low-rise residential, and hotel/motel occupancies.
<i>DOUBLE-FACED SIGN</i>	See <i>Sign</i> .
<i>DUAL-GLAZED GREENHOUSE WINDOWS</i>	are a type of dual-glazed fenestration product which adds conditioned volume but not conditioned floor area to a building.
<i>DUCT LOSSES</i>	is heat transfer into or out of a space conditioning system duct through conduction or leakage.
<i>DUCT SEALING</i>	is a procedure for installing a space conditioning distribution system that minimizes leakage of air from or to the distribution system. Minimum specifications for installation procedures, materials, diagnostic testing and field verification are contained in the Reference Residential Appendix RA3 and Reference Nonresidential Appendix NA2.
<u><i>DUCT SYSTEM</i></u>	<u>Includes all ducts, duct fittings, plenums, and fans assembled to form a continuous passageway for the distribution of air.</u> <u>ENTIRELY NEW OR REPLACEMENT DUCT SYSTEMS installed as part of an alteration of a dwelling unit's space conditioning system(s) shall be constructed of at least 75% new duct material and may include reused parts from the dwelling unit's existing duct system (e.g. registers, boots, air handler, coil, plenums, duct material, etc.) but only if the reused parts are accessible and they can be sealed to prevent leakage.</u>
<i>DWELLING UNIT</i>	is a dwelling unit within a multifamily building project or a single family building.
<i>DYNAMIC GLAZING (DG) PRODUCTS</i>	are any fenestration product with the ability to change its performance properties, allowing the occupant to control their environment by tinting (or darkening) a window with the flip of a switch or by raising and lowering a shade positioned between panes of glass.

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Term	Definition
EA	is Effective Aperture.
EAST-FACING	See <i>Orientation</i> .
ECONOMIZER, AIR	is a ducting arrangement, including dampers, linkages, and an automatic control system, that allows a cooling supply fan system to supply outside air to reduce or eliminate the need for mechanical cooling.
ECONOMIZER, WATER	is a system by which the supply air of a cooling system is cooled directly or indirectly by evaporation of water, or other appropriate fluid, in order to reduce or eliminate the need for mechanical cooling.
EDGE OF GLASS	is the portion of fenestration glazing that is within two and one half inches of the spacer.
EER	See <i>Energy Efficiency Ratio</i> .
EFFECTIVE APERTURE (EA)	is a measure of the extent that vertical glazing or skylights are effective for providing daylighting.
EFFICACY, LAMP	is the quotient of rated initial lamp lumens divided by the rated lamp power (watts), without including auxiliaries such as ballasts, transformers, and power supplies.
<u>EFFECTIVE TRIM CAPACITY</u>	<u>is the (continuous) range within 15% of the minimum specific power for a compressor (kW/acfm).</u>
EFFICACY, LIGHTING SYSTEM	is the quotient of rated initial lamp lumens measured at 25°C according to IESNA and ANSI Standards, times the ballast factor, divided by the input power (watts) to the ballast or other auxiliary device (e.g. transformer); expressed in lumens per watt.
ELECTRIC HEATING	is an electrically powered heating source, such as electric resistance, heat pumps with no auxiliary heat or with electric auxiliary heat, solar with electric back-up, etc.
ELECTRIC RESISTANCE HEATING	is a heating system that converts electric energy directly into heat energy by passing a current through an electric <u>resistance</u> . Electric resistance heat is inherently less efficient than gas as a heating energy source because it must account for losses associated with generation from depletable fossil fuels and transmission to the building site.
ELECTRICAL/ MECHANICAL ROOM	See <i>Nonresidential Functional Area or Type of Use</i> .
ELECTRONICALLY-COMMUTATED MOTOR	is a brushless DC motor with a permanent magnet rotor that is surrounded by stationary motor windings, and an electronic controller that varies rotor speed and direction by sequentially supplying DC current to the windings.
EMITTANCE, THERMAL	is the ratio of the radiant heat flux emitted by a sample to that emitted by a blackbody radiator at the same temperature.

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Term	Definition
ENCLOSED SPACE	is space that is substantially surrounded by solid surfaces, including walls, ceilings or roofs, doors, fenestration areas, and floors or ground.
ENERGY BUDGET	is the maximum amount of Time Dependent Valuation (TDV) energy that a proposed building, or portion of a building, can be designed to consume, calculated with the approved procedures specified in Title 24, Part 6.
ENERGY EFFICIENCY RATIO (EER)	is the ratio of net cooling capacity (in Btu/hr.) to total rate of electrical energy input (in watts), of a cooling system under designated operating conditions, as determined using the applicable test method in the Appliance Efficiency Regulations or §112.
ENERGY EFFICIENCY STANDARDS	See <i>Building Energy Efficiency Standards</i> .
ENERGY FACTOR (EF)	of a water heater is a measure of overall water heater efficiency as determined using the applicable test method in the Appliance Efficiency Regulations.
ENERGY MANAGEMENT CONTROL SYSTEM (EMCS)	is often a computerized control system designed to regulate the energy consumption of a building by controlling the operation of energy consuming systems, such as the heating, ventilation and air conditioning (HVAC), lighting and water heating systems. The EMCS is also capable of monitoring environmental and system loads and adjusting HVAC operations in order to optimize energy usage and respond to demand response signals.
ENERGY OBTAINED FROM DEPLETABLE SOURCES	is electricity purchased from a public utility, or any energy obtained from coal, oil, natural gas, or liquefied petroleum gases.
ENERGY OBTAINED FROM NONDEPLETABLE SOURCES	is energy that is not energy obtained from depletable sources.
ENFORCEMENT AGENCY	is the city, county, or state agency responsible for issuing a building permit.
ENTIRE BUILDING	is the ensemble of all enclosed space in a building, including the space for which a permit is sought, plus all existing conditioned and unconditioned space within the structure.
ENVELOPE	See <i>Building Envelope</i> .
EVAPORATIVE COOLER	provides cooling to a building by either direct contact with water (direct evaporative cooler), no direct contact with water (indirect evaporative cooler), or a combination of direct and indirect cooling (indirect/direct evaporative cooler). The credit offered for evaporative coolers depends on building type and climate.

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Term	Definition
EXCEPTIONAL METHOD	is a method approved by the Commission that analyzes designs, materials, or devices, which cannot be adequately modeled using alternative calculation methods. <u>is a special modeling capability or calculation method for estimating the energy performance of building features that cannot be adequately modeled using the public domain computer programs.</u>
EXECUTIVE DIRECTOR	is the Executive Director of the Commission.
EXERCISE CENTER / GYMNASIUM	See <i>Nonresidential Functional Area or Type of Use</i> .
EXFILTRATION	is uncontrolled outward air leakage from inside a building, including leakage through cracks and interstices, around windows and doors, and through any other exterior partition or duct penetration.
EXHIBIT	See <i>Nonresidential Functional Area or Type of Use</i> .
EXPOSED THERMAL MASS	is mass that is directly exposed (uncovered) to the conditioned space of the building. Concrete floors that are covered by carpet are not considered exposed thermal mass.
EXTERIOR DOOR	is a door through an exterior partition that is opaque or has a glazed area that is less than or equal to one-half of the door area. Doors with a glazed area of more than one half of the door area are treated as a fenestration product.
EXTERIOR FLOOR/SOFFIT	is a horizontal exterior partition, or a horizontal demising partition, under conditioned space. For low-rise residential occupancies, exterior floors also include those on grade.
EXTERIOR PARTITION	is an opaque, translucent, or transparent solid barrier that separates conditioned space from ambient air or space that is not enclosed. For low-rise residential occupancies, exterior partitions also include barriers that separate conditioned space from unconditioned space, or the ground.
EXTERIOR ROOF/CEILING	is an exterior partition, or a demising partition, that has a slope less than 60 degrees from horizontal, that has conditioned space below, and that is not an exterior door or skylight.
EXTERIOR ROOF/CEILING AREA	is the area of the exterior surface of exterior roof/ceilings.
EXTERIOR WALL	is any wall or element of a wall, or any member or group of members, which defines the exterior boundaries or courts of a building and which has a slope of 60 degrees or greater with the horizontal plane. An exterior wall or partition is not an exterior floor/soffit, exterior door, exterior roof/ceiling, window, skylight, or demising wall.
EXTERIOR WALL AREA	is the area of the opaque exterior surface of exterior walls.

Term	Definition
<i>EXTERNALLY ILLUMINATED SIGN</i>	See <i>Sign</i> .
<i>FACTORY ASSEMBLED COOLING TOWERS</i>	are cooling towers constructed from factory-assembled modules either shipped to the site in one piece or put together in the field.

Term	Definition
<u>FENESTRATION</u>	<p>Definitions include the following:</p> <p><u>AREA is the area of fenestration products (i.e., windows, skylights and glass doors) in exterior openings, including the sash or frame area. The nominal area (from nominal dimensions such as 4.0 X 4.0) or rough opening is also acceptable.</u></p> <p><u>Where the term "glazing area" is used in the standards it is the entire fenestration area, not just the area of glazing, unless stated otherwise.</u></p> <p><u>See Fenestration Product, Glazing Area and Shading.</u></p>
	<p><u>BAY WINDOW is a combination assembly which is composed of three or more individual windows either joined side by side or installed within opaque assemblies and which projects away from the wall on which it is installed. Center windows, if used are parallel to the wall on which the bay is installed, the end panels or two side windows are angled with respect to the center window(s). Common angles are 30° and 45°, although other angles are sometimes employed.</u></p>
	<p><u>CURTAIN WALL/STOREFRONT is an external nonbearing wall intended to separate the exterior and interior environments, which may consist entirely (or principally) of a combination of framing materials, glass and glazing, opaque in-fill and other surfacing materials supported by or within a framework.</u></p>
	<p><u>DUAL-GLAZED GREENHOUSE WINDOWS are a type of dual-glazed fenestration product which adds conditioned volume but not conditioned floor area to a building.</u></p>
	<p><u>FENESTRATION PRODUCT is any transparent or translucent material plus any sash, frame, mullions and dividers, in the envelope of a building, including, but not limited to, windows, sliding glass doors, French doors, skylights, curtain walls, garden windows, glass block, and other doors with a glazed area of more than one half of the door area.</u></p>
	<p><u>FENESTRATION SYSTEM is a collection of fenestration products included in the design of a building. (See "fenestration product")</u></p>
	<p><u>FIELD-FABRICATED is a fenestration product including a glazed exterior door whose frame is made at the construction site of standard dimensional lumber or other materials that were not previously cut, or otherwise formed with the specific intention of being used to fabricate a fenestration product or exterior door. Field fabricated does not include site-built fenestration with a label certificate or products required to have temporary or permanent labels.</u></p>

Term	Definition
	<p>FIN is a contiguous opaque surface, oriented vertically and projecting outward horizontally from an exterior vertical surface.</p> <p>FIN OFFSET is the horizontal distance from the edge of exposed exterior glazing at the jamb of a window to the fin.</p> <p>FIN PROJECTION is the horizontal distance, measured outward horizontally from the surface of exposed exterior glazing at the jamb of a window to the outward edge of a fin.</p> <p>FIXED is fenestration that is not designed to be opened or closed.</p> <p>GLAZED DOOR See DOOR.</p> <p>GREENHOUSE/ GARDEN WINDOW is a window unit that consists of a three-dimensional, five-sided structure, with or without an operating sash and creates conditioned volume but no conditioned floor area to a building.</p> <p>MANUFACTURED is a fenestration product constructed of materials which are factory cut or otherwise factory formed with the specific intention of being used to fabricate a fenestration product. A manufactured fenestration product is typically factory-assembled before delivery to a job site. However a “knocked-down” or partially assembled product sold as a fenestration product is also a manufactured fenestration product when provided with temporary and permanent labels as described in Section 10-111; otherwise it is a site-built fenestration product when provided with temporary and permanent labels as described in Section 10-111.</p> <p>NFRC 100 is the National Fenestration Rating Council document entitled “NFRC 100: Procedure for Determining Fenestration Product U-factors.” (2010; NFRC 100 includes procedures for site fenestration formerly included in a separate document, NFRC 100-SB)</p> <p>NFRC 200 is the National Fenestration Rating Council document entitled “NFRC 200: Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence.” (2010)</p> <p>NFRC 202 is the National Fenestration Rating Council document entitled “NFRC 200: Procedure for Determining Fenestration Product Visible Transmittance at Normal Incidence.” (2010)</p> <p>NFRC 400 is the National Fenestration Rating Council document entitled “NFRC 400: Procedure for Determining Fenestration Product Air Leakage.” (10)</p>

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Term	Definition
	<p><u>OPERABLE</u> is fenestration that is designed to be opened or closed.</p> <p><u>OPERABLE SHADING DEVICE</u> is a device at the interior or exterior of a building or integral with a fenestration product, which is capable of being operated, either manually or automatically, to adjust the amount of solar radiation admitted to the interior of the building.</p> <p><u>OVERHANG</u> is a contiguous opaque surface, oriented horizontally and projecting outward horizontally from an exterior vertical surface.</p> <p><u>OVERHANG OFFSET</u> is the vertical distance from the edge of exposed exterior glazing at the head of a window to the overhang.</p> <p><u>OVERHANG PROJECTION</u> is the horizontal distance, measured outward horizontally from the surface of exposed exterior glazing at the head of a window to the outward edge of an overhang.</p> <p><u>SITE-BUILT</u> is fenestration designed to be field-glazed or field assembled units using specific factory cut or otherwise factory formed framing and glazing units. Examples of site-built fenestration include storefront systems, curtain walls, and atrium roof systems.</p> <p><u>SOLAR HEAT GAIN COEFFICIENT (SHGC)</u> is the ratio of the solar heat gain entering the space through the fenestration area to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation, which is then reradiated, conducted, or convected into the space.</p> <p><u>SOLAR HEAT GAIN COEFFICIENT, CENTER OF GLAZING (SHGC_c)</u> is the SHGC for the center of glazing area.</p> <p><u>SOLAR HEAT GAIN COEFFICIENT, TOTAL FENESTRATION PRODUCT (SHGC or SHGCT)</u> is the SHGC for the total fenestration product.</p> <p><u>SPANDREL</u> is opaque glazing material most often used to conceal building elements between floors of a building so they cannot be seen from the exterior, also known as “opaque in-fill systems”.</p> <p><u>U-FACTOR, FENESTRATION</u> is the overall coefficient of thermal transmittance of a construction assembly, in Btu/(hr x ft² x °F), including air film resistance at both surfaces.</p> <p><u>U-FACTOR, CENTER OF GLAZING (U-FACTOR_c)</u> is the U-Factor for the center of glazing area.</p>

Term	Definition
	<p><u>U-FACTOR, TOTAL FENESTRATION PRODUCT (U-FACTOR or U-FACTORt)</u> is the U-Factor for the total fenestration product.</p> <p><u>VISIBLE TRANSMITTANCE (VT)</u> is the ratio (expressed as a decimal) of visible light that is transmitted through a glazing fenestration to the light that strikes the material fenestration. as For products with the scope of NFRC 200, visible transmittance shall be calculated in NFRC 200. For products not within the scope of NFRC 200 (diffusing and projecting glazing's), visible transmittance shall be the solar photometric transmittance of the glazing material(s) determined in accordance with NFRC 202 or ASTM E972.</p> <p><u>VISIBLE TRANSMITTANCE, CENTER OF GLAZING (VT_c)</u> the VT for the center of glazing area.</p> <p><u>VISIBLE TRANSMITTANCE, TOTAL FENESTRATION PRODUCT (VT or VT_t)</u> is the VT for the total fenestration product.</p>
<u>FENESTRATION AREA</u>	<p>is the area of fenestration products (i.e., windows, skylights and glass doors) in exterior openings, including the sash or frame area. The nominal area (from nominal dimensions such as 4.0 X 4.0) or rough opening is also acceptable.</p> <p>Where the term "glazing area" is used in the standards it is the entire fenestration area, not just the area of glazing, unless stated otherwise.</p> <p>See <i>Fenestration Product, Glazing Area and Shading</i>.</p>
<u>FENESTRATION PRODUCT</u>	<p>is any transparent or translucent material plus any sash, frame, mullions and dividers, in the envelope of a building, including, but not limited to, windows, sliding glass doors, French doors, skylights, curtain walls, garden windows, glass block and other doors with a glazed area of more than one half of the door area.</p>
<u>FENESTRATION PRODUCT, FIELD-FABRICATED</u>	<p>is a fenestration product, including a glazed exterior door, whose frame is made at the construction site of standard dimensional lumber or other materials that were not previously cut, or otherwise formed with the specific intention of being used to fabricate a fenestration product or exterior door. Field fabricated does not include site-built fenestration with a certificate label or products required to have temporary or permanent labels.</p>

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Term	Definition
FENESTRATION PRODUCT, MANUFACTURED	is a fenestration product constructed of materials which are factory cut or otherwise factory formed with the specific intention of being used to construct a fenestration product. A manufactured fenestration product is typically factory-assembled before delivery to a job site. However a “knocked-down” or partially assembled product sold as a fenestration product is also a manufactured fenestration product when provided with temporary and permanent labels as described in §10-111 of Title 24 Part 1; otherwise it is a site-built fenestration product when provided with temporary and permanent labels as described in §10-111.
FENESTRATION PRODUCT, SITE-BUILT	is fenestration designed to be field-glazed or field assembled units using specific factory cut or otherwise factory formed framing and glazing units. Examples of site-built fenestration include storefront systems, curtain walls, and atrium roof systems.
FENESTRATION SYSTEM	is a collection of fenestration products included in the design of a building. (See “fenestration product”)
FENESTRATION, BAY WINDOW	is a combination assembly which is composed of three or more individual windows either joined side by side or installed within opaque assemblies and which projects away from the wall on which it is installed. Center windows, if used are parallel to the wall on which the bay is installed. The two side windows are angled with respect to the center window(s). Common angles are 30° and 45°, although other angles are sometimes employed.
FENESTRATION, CURTAIN WALL	is an external, nonbearing wall intended to separate the exterior and interior environments, which may consist entirely (or principally) of a combination of framing materials, glass and glazing, opaque in-fill and other surfacing materials supported by or within a framework.
FENESTRATION, GARDEN WINDOW	a window unit that consists of a three-dimensional, five-sided structure, with or without an operating sash, also known as greenhouse window.
FENESTRATION, SPANDREL	is opaque glazing material most often used to conceal building elements between floors of a building so that they cannot be seen from the exterior, also known as “opaque in-fill systems”.
FIELD ERECTED COOLING TOWERS	are cooling towers which are custom designed for a specific application and which can not be delivered to a project site in the form of factory assembled modules due to their size, configuration, or materials of construction.

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Term	Definition
<u>FIELD TECHNICIAN</u>	<u>is responsible for performing the acceptance test procedures and documenting the results of the acceptance tests on the Certificate of Acceptance document. The Field Technician shall sign the Certificate of Acceptance to certify that the information provided on the Certificate of Acceptance is true and correct.</u>
FIELD-FABRICATED FENESTRATION PRODUCT OR EXTERIOR DOOR	is a fenestration product or exterior door whose frame is made at the construction site of standard dimensional lumber or other materials that were not previously cut, or otherwise formed with the specific intention of being used to fabricate a fenestration product or exterior door. Field fabricated does not include site-built fenestration with a label certificate or products required to have temporary or permanent labels.
FINANCIAL TRANSACTION	See <i>Nonresidential Functional Area or Type of Use</i> .
FIREPLACE	is a hearth and fire chamber or similar prepared place in which a fire may be made and which is built in conjunction with a flue or chimney, including but not limited to factory-built fireplaces, masonry fireplaces, and masonry heaters as further clarified in the CBC.
FLOOR AREA	is the floor area (in square feet) of enclosed conditioned or unconditioned space on all floors of a building, as measured at the floor level of the exterior surfaces of exterior walls enclosing the conditioned or unconditioned space.
FLOOR/SOFFIT TYPE	is a type of floor/soffit assembly having a specific heat capacity, framing type, and U-factor.
<u>FLUID COOLER</u>	<u>is a fan-powered heat rejection device that includes a water circuit connected by a closed circulation loop to a water-cooled refrigerant condenser, and may be either evaporative-cooled or air-cooled.</u>
FLUX	is the rate of energy flow per unit area.
FOOD PREPARATION EQUIPMENT	is cooking equipment intended for commercial use, including coffee machines, espresso coffee makers, conductive cookers, food warmers including heated food servers, fryers, griddles, nut warmers, ovens, popcorn makers, steam kettles, ranges, and cooking appliances for use in commercial kitchens, restaurants, or other business establishments where food is dispensed.
FOSSIL FUELS	are fuels which are derived from natural gas, coal, oil and liquefied petroleum products. These are generally nonrenewable resources, although natural gas may also be produced by other means, such as biomass conversion.
FRAMED PARTITION OR ASSEMBLY	is a partition or assembly constructed using separate structural members spaced not more than 32 inches on center.

Term	Definition
FRAMING EFFECTS	is the effect on the overall U-factor due to the type and amount of framing in walls, roofs/ceilings and floors . For compliance, fixed values for wood framing percentages are assumed when calculating U-factors.
FRAMING PERCENTAGE	is the fraction of the surface of a partition that is framing as compared to that portion which is cavity.
<u>FREEZER</u>	<u>is a space designed to maintain less than 28°F and space designed to be convertible between cooler and freezer operation.</u>
FRONT	is the primary entry side of the building (front facade) used as a reference in defining the orientation of the building or unit plan. The orientation of the front facade may not always be the same as that for the front door itself.
GAP WIDTH	is the distance between <u>glazings-lites</u> in multi-glazed systems. This is typically measured from inside surface to inside surface, though some manufacturers may report "overall" IG width, which is measured from outside surface to outside surface.
GAS COOLING EQUIPMENT	is cooling equipment that produces chilled water or cold air using natural gas or liquefied petroleum gas as the primary energy source.
GAS HEATING SYSTEM	is a natural gas or liquefied petroleum gas heating system.
GAS INFILLS	are air, argon, krypton, CO ₂ , SF ₆ , or a mixture of these gasses between the panes of glass in insulated glass units.
GAS LOG	is a self-contained, free-standing, open-flame, gas-burning appliance consisting of a metal frame or base supporting simulated logs, and designed for installation only in a vented fireplace.
GENERAL COMMERCIAL AND INDUSTRIAL WORK	See <i>Nonresidential Functional Area or Type of Use</i> .
<u>GENERAL LIGHTING</u>	<u>is lighting designed to provide a substantially uniform level of illumination throughout an area, exclusive of any provision for special visual tasks or decorative effect. When designed for lower-than-task illuminance used in conjunction with other specific task lighting systems, it is also called "ambient" lighting.</u>
GEO THERMAL HEAT PUMP	See <i>Ground Source Heat Pump</i> .
<u>GLAZED DOOR</u>	<u>See <i>DOOR</i></u>
GLAZING	See <i>Fenestration Product</i> .
GLAZING AREA	See <i>Fenestration Area</i> .
<u>GLOBAL WARMING POTENTIAL (GWP)</u>	<u>is the radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time.</u>

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Term	Definition
<u>GLOBAL WARMING POTENTIAL VALUE (GWP VALUE)</u>	<u>is the 100-yr GWP value first published by the Intergovernmental Panel on Climate Change (IPCC) in its Second Assessment Report (SAR) (IPCC, 1995; or if a 100-yr GWP value was not specified in the IPCC SAR, it means the GWP value published by the IPCC in its Fourth Assessment A-3 Report (AR4) (IPCC, 2007); or if a 100-yr GWP value was not specified in the IPCC AR4, then the GWP value will be determined by the Commission based on data, studies and/or good engineering or scientific judgment. Both the 1995 IPCC SAR values and the 2007 IPCC AR4 values are published in table 2.14 of the 2007 IPCC AR4. The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14."</u>
GOVERNMENTAL AGENCY	is any public agency or subdivision thereof, including, but not limited to, any agency of the state, a county, a city, a district, an association of governments, or a joint power agency.
GREENHOUSE WINDOW	is a type of fenestration product which adds conditioned volume but no conditioned floor area to a building.
GRILLES	See <i>Dividers</i> .
GROCERY SALES	See <i>Nonresidential Functional Area or Type of Use</i> .
GROSS EXTERIOR ROOF AREA	is the sum of the skylight area and the exterior roof/ceiling area.
GROSS EXTERIOR WALL AREA	is the sum of the window area, door area, and exterior wall area.
GROUND FLOOR AREA	is defined as the slab-on-grade area of a slab-on-grade building and the conditioned footprint area of a raised floor building (for compliance with the low-rise residential standards).
GROUND SOURCE HEAT PUMP	is a heat pump that uses the earth as a source of energy for heating and a sink for energy when cooling. Some systems pump water from an aquifer in the ground and return the water to the ground after transferring heat from or to the water. A few systems use refrigerant directly in a loop of piping buried in the ground. Those heat pumps that use either a water loop or pump water from an aquifer have efficiency test methods that are accepted by the Energy Commission. These efficiency values are certified to the Energy Commission by the manufacturer and are expressed in terms of heating Coefficient of Performance (COP) and cooling Energy Efficiency Ratio (EER).

Term	Definition
GU-24	is the designation of a lamp holder and socket configuration, based on a coding system by the International Energy Consortium, where “G” indicates the broad type of two or more projecting contacts, such as pins or posts, “U” distinguishes between lamp and holder designs of similar type but that are not interchangeable due to electrical or mechanical requirements, and “24” indicates 24 millimeters center to center spacing of the electrical contact posts.
<u>HABITABLE SPACE</u>	<u>is building space intended for continual human occupancy; such space generally includes areas used for living, sleeping, dining, and cooking but does not generally include bathrooms, toilets, hallways, storage areas, closets, or utility rooms.</u>
HABITABLE STORY	is a story that contains space in which humans may work or live in reasonable comfort, and that has at least 50 percent of its volume above grade.
HARD COAT	is a low emissivity metallic coating applied to the glass, which will be installed in a fenestration product, through a pyrolytic process (at or near the melting point of the glass so that it bonds with the surface layer of glass). Hard coatings are less susceptible to oxidation and scratching as compared to soft coats. Hard coatings generally do not have as low emissivity as soft coats.
HARDSCAPE	See <i>Outdoor Lighting</i> .
HEAT CAPACITY (HC)	is the amount of heat necessary to raise the temperature of all the components of a unit area in an assembly by 1°F. It is calculated as the sum of the average thickness times the density times the specific heat for each component, and is expressed in Btu per square foot per °F.
HEAT PUMP	is a device that is capable of heating by refrigeration, and that may include a capability for cooling.
HEATED SLAB FLOOR	is a concrete slab floor or a lightweight concrete topping slab laid over a raised floor, with embedded space heating hot water pipes. The heating system using the heated slab floor is sometimes referred to as radiant slab floors or radiant heating.
HEATING EQUIPMENT	is equipment used to provide mechanical heating for a room or rooms in a building.
HEATING SEASONAL PERFORMANCE FACTOR (HSPF)	is the total heating output of a central air-conditioning heat pump (in Btu) during its normal use period for heating divided by the total electrical energy input (in watt-hours) during the same period, as determined using the applicable test method in the Appliance Efficiency Regulations.
HERS PROVIDER	See <i>Home Energy Rating System Provider</i> .

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Term	Definition
<i>HERS PROVIDER DATA REGISTRY</i>	is a residential data registry maintained by an approved HERS provider. means the database maintained by the HERS provider that contains the records of the HERS rater's field verification and diagnostic testing results, including dwelling unit identification information, test/certification identification information, and builder identification information.
<i>HERS RATER</i>	See <i>Home Energy Rating System Rater</i> .
<i>HI</i>	is the Hydronics Institute of the Gas Appliance Manufacturers Association (GAMA).
<i>HI HTG BOILER STANDARD</i>	is the Hydronics Institute document entitled "Testing and Rating Standard for Rating Boilers," 1989.
<i>HIGH BAY</i>	See <i>Nonresidential Functional Area or Type of Use, General commercial and industrial work</i> .
<i>HIGH-RISE RESIDENTIAL BUILDING</i>	is a building, other than a hotel/motel, of Occupancy Group R, Division 1 with four or more habitable stories.
<i>HOME ENERGY RATING SYSTEM (HERS) PROVIDER</i>	is an organization that approved by the Commission has approved to administer a home energy rating system program, certify raters and maintain quality control over field verification and diagnostic testing required for compliance with the Energy Efficiency Standards.
<i>HOME ENERGY RATING SYSTEM RATER</i>	is a person certified by a Commission approved HERS Provider to perform the field verification and diagnostic testing required for demonstrating compliance with the Energy Efficiency Standards.

Term	Definition
<u>HOOD</u>	<p data-bbox="824 247 1446 401">is a device designed to capture and contain cooking effluent including, grease, smoke, steam, heat, and vapor until it is exhausted through a duct or recirculating system. Hoods are categorized as Type 1 or Type 2:</p> <p data-bbox="824 415 1463 688">TYPE I HOOD is a hood used for collecting and removing convective heat, grease particulate, condensable vapor, and smoke. It includes listed grease filters, baffles, or extractors for removing the grease and a fire-suppression system. Type I hoods are installed over cooking appliances, such as ranges, fryers, griddles, broilers, and ovens, that produce smoke or grease-laden vapors. For Type I hoods, the following types of hoods are commonly available:</p> <p data-bbox="873 703 1455 1073">WALL-MOUNTED CANOPY HOOD is mounted against a wall above a single appliance or a line of appliances, or it may be free-standing with a vertical back panel extending from the rear of the appliance(s) to the hood. It typically extends beyond the front and sides of the appliance(s) on all open sides. The wall acts as a back panel, forcing replacement air to be drawn across the front and/or side(s) of the cooking appliance, thus increasing the effectiveness of the hood to capture and contain effluent generated by the cooking operations.</p> <p data-bbox="873 1087 1455 1331">SINGLE ISLAND CANOPY HOOD is placed over a single appliance or line of appliances. It is open on all sides and overhangs the front, rear, and sides of the appliance(s). A single island canopy is more susceptible to cross-drafts and requires a greater exhaust airflow than an equivalent sized wall-mounted canopy to capture and contain effluent generated by the cooking operations.</p> <p data-bbox="873 1346 1455 1528">DOUBLE ISLAND CANOPY HOOD is placed over back-to-back appliances or lines of appliances. It is open on all sides and overhangs the front and the sides of the appliance(s). It may have a wall panel between the backs of the appliances.</p> <p data-bbox="873 1543 1455 1913">BACKSHELF or PROXIMITY HOOD is also referred to as a low-proximity hood or as a sidewall hood where wall mounted. Its front lower lip is low over the appliance(s) and is typically set back from the front of the appliance(s). It is always closed to the rear of the appliances by a panel where freestanding or by a panel or wall when wall mounted, and its height above the cooking surface varies. This style of hood can be constructed with partial end panels to increase its effectiveness in capturing the effluent generated by the cooking operations.</p>

Term	Definition
	<p>EYEBROW HOOD is mounted directly to the face or top of an appliance above the opening(s) or door(s) from which effluent is emitted, overhanging the front of the opening(s) to capture the effluent.</p> <p>PASS OVER HOOD is a backshelf hood constructed and installed low enough to allow food to be passed over the top.</p> <p>TYPE II HOOD is a hood that collects and removes steam, heat, and products of combustion where grease or smoke is not present. It may or may not have grease filters or baffles and typically does not have a fire-suppression system. They can be used where the cooking operation from each appliance underneath the hood does not produce grease in excess of 5 mg/m when measured at 500 cfm exhaust airflow.</p>
HORIZONTAL GLAZING	See <i>Skylight</i> .
HOTEL AND MOTEL GUEST ROOM	is a guest room of a Hotel/Motel.
HOTEL FUNCTION AREA	See <i>Nonresidential Functional Area or Type of Use</i> .
HOTEL LOBBY	See <i>Nonresidential Functional Area or Type of Use, Lobby, Hotel</i> .
HOTEL/MOTEL	<p>is a building or buildings incorporating six or more guest rooms or a lobby serving six or more guest rooms, where the guest rooms are intended or designed to be used, or which are used, rented, or hired out to be occupied, or which are occupied for sleeping purposes by guests, and all conditioned spaces within the same building envelope.</p> <p>Hotel/motel also includes all conditioned spaces which are (1) on the same property as the hotel/motel, (2) served by the same central heating, ventilation, and air-conditioning system as the hotel/motel, and (3) integrally related to the functioning of the hotel/motel as such, including, but not limited to, exhibition facilities, meeting and conference facilities, food service facilities, lobbies, and laundries.</p>
HSPF	See <i>Heating Seasonal Performance Factor</i> .
HVAC SYSTEM	See <i>Space-conditioning System</i> .
HYDRONIC COOLING SYSTEM	is any cooling system which uses water or a water solution as a source of cooling or heat rejection, including chilled water systems (both air and water-cooled) as well as water-cooled or evaporatively cooled direct expansion systems, such as water source (water-to-air) heat pumps.

Term	Definition
HYDRONIC SPACE HEATING SYSTEM	is a system that uses water-heating equipment, such as a storage tank water heater or a boiler, to provide space heating. Hydronic space heating systems include both radiant floor systems and convective or fan coil systems. See <i>Combined Hydronic Space/Water Heating System</i> .
IESNA-IES HB	See IESNA-IES <i>Lighting Handbook</i> .
IESNA-IES LIGHTING HANDBOOK	is the Illuminating Engineering Society National Association document entitled "The IESNA-IES Lighting Handbook: Reference and Applications, Ninth <u>Tenth</u> Edition" (20102009).
IG UNIT	See <i>Insulating Glass Unit</i> .
ILLUMINATED FACE	See <i>Sign</i> .
INDEPENDENT IDENTITY	is having no financial interest in, and not advocating or recommending the use of any product or service as a means of gaining increased business with, firms or persons specified in Section 1673(i) of the California Home Energy Rating System Program regulations (California Code of Regulations, Title 20, Division 2, Chapter 4, Article 8). (Financial <u>Interest</u> is an ownership interest, debt agreement, or employer/employee relationship. Financial interest does not include ownership of less than 5 percent of the outstanding equity securities of a publicly traded corporation.) NOTE: The definitions of "independent entity" and "financial interest," together with Title 20, Section <u>1673(i)</u> , prohibit conflicts of interest between HERS Providers and HERS Raters, or between Providers/Raters and builders/subcontractors.
INDIRECTLY CONDITIONED SPACE	is enclosed space, including, but not limited to, unconditioned volume in atria, that (1) is not directly conditioned space; and (2) either (a) has a thermal transmittance area product (UA) to directly conditioned space exceeding that to the outdoors or to unconditioned space and does not have fixed vents or openings to the outdoors or to unconditioned space, or (b) is a space through which air from directly conditioned spaces is transferred at a rate exceeding three air changes per hour.
INDUSTRIAL AND COMMERCIAL STORAGE BUILDING	See <i>Nonresidential Functional Area or Type of Use</i> .
INDUSTRIAL EQUIPMENT	is manufactured equipment used in industrial processes.
INFILTRATION	is uncontrolled inward air leakage from outside a building or unconditioned space, including leakage through cracks and interstices, around windows and doors, and through any other exterior or demising partition or pipe or duct penetration.

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Term	Definition
INFILTRATION CONTROLS	are measures taken to control the infiltration of air. (Mandatory Infiltration control measures include weather-stripping, caulking, and sealing in and around all exterior joints and openings.)
INSTALLATION CERTIFICATE (CF-6R)	is a document with information required by the Commission that is prepared by the builder or installer verifying that the measure was installed to meet the requirements of the Standards.
INSTALLER	means the builder's subcontractor or the person installing the equipment.
INSULATING GLASS UNIT	is a self-contained unit, including the glazings (lites or panes of glass?), spacer(s), films (if any), gas infills, and edge caulking, that is installed in fenestration products. It does not include the frame.
INSULATION	<p>Insulation is a material that limits heat transfer. Insulating material of the types and forms listed in Section 110.8(a) may be installed only if the manufacturer has certified that the insulation complies with the Standards for Insulating Material, Title 24, Part 12, Chapter 12-13 of the California Code of Regulations.</p> <p>(Insulation must be placed within or contiguous with a wall, ceiling or floor, or over the surface of any appliance or its intake or outtake mechanism for the purpose of reducing heat transfer or reducing adverse temperature fluctuations of the building, room or appliance.</p> <p>Insulation may be installed in wall, ceiling/roof and raised floor assemblies and at the edge of a slab-on-grade. Movable insulation is designed to cover windows and other glazed openings part of the time to reduce heat loss and heat gain.)</p>
INTEGRATED PART LOAD VALUE (IPLV)	is a single-number figure of merit based on part load EER or COP expressing part load efficiency for air-conditioning and heat pump equipment on the basis of weighted operation at various load capacities for the equipment as determined using the applicable test method in the Appliance Efficiency Regulations or §112.
INTERIOR PARTITION	is an interior wall or floor/ceiling that separates one area of conditioned space from another within the building envelope.
INTERNALLY ILLUMINATED SIGN	See <i>Sign</i> .
IPLV	See <i>Integrated Part Load Value</i> .
ISO 13256-1	is the International Organization for Standardization document entitled "Water-source heat pumps -- Testing and rating for performance -- Part 1: Water-to-air and brine-to-air heat pumps," 1998.

Term	Definition
ISO/IEC 17011	is the International Organization for Standardization and the International Electrotechnical Commission document entitled "Conformity assessment – General requirements for accreditation bodies accrediting conformity assessment bodies." (EN ISO/IEC 17011:2004)
ISO/IEC 17020	is the International Organization for Standardization and the International Electrotechnical Commission document entitled "General criteria for the operation of various types of bodies performing inspection." (EN ISO/IEC 17020:2004)
ISO/IEC 17025	is the International Organization for Standardization and the International Electrotechnical Commission document entitled "General requirements for the competence of testing and calibration laboratories." (EN ISO/IEC 17025:2005)
ISOLATION DEVICE	is a device that prevents the conditioning of a zone or group of zones in a building while other zones of the building are being conditioned.
KITCHEN	See Residential Space Type.
KITCHEN/FOOD PREPARATION	See Nonresidential Functional Area or Type of Use.
KNEE WALL	is a sidewall separating conditioned space from attic space under a pitched roof. Knee walls should be insulated as an exterior wall as specified by the chosen method of compliance.
LANDSCAPE LIGHTING	See Outdoor Lighting.
LANTERN	See Outdoor Lighting.
<u>LARGEST NET INCREMENT</u>	<u>is the largest increase in capacity when switching between combinations of base compressors that is expected to occur under the system control scheme.</u>
LAUNDRY	See Nonresidential Functional Area or Type of Use.
LEFT SIDE	is the left side of the building as one faces the front facade from the outside. This designation is used on the Certificate of Compliance and other compliance documentation.
LIBRARY	See Nonresidential Functional Area or Type of Use.
LIGHT-EMITTING DIODE (LED)	is a pn-junction semiconductor device that emits incoherent optical radiation when biased in the forward direction. The acronym "LED" typically refers to an LED component, LED device, or LED package. Hybrid LED Luminaire is a complete lighting unit consisting of a light source and driver together with parts to distribute light, to position and protect the light source, and to connect the light source to a branch circuit. The light sources in the Hybrid LED Luminaire contain both LED Source Systems, or LED Lamps, as well as other type of light sources such as incandescent or fluorescent lamps. The Hybrid LED Luminaire is intended to be connected directly to a

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Term	Definition
	<p>branch circuit.</p> <p>LED Array is an assembly of LED components, LED devices or LED packages on a printed circuit board or substrate, possibly with optical elements and additional thermal, mechanical, and electrical (LED Control Circuitry) interfaces that are connected to the load side of LED Driver (Power Source). LED Array does not contain an LED Driver (Power Source) and is not connected directly to the branch circuit.</p> <p>LED Component (or LED Device, or LED Package) is a semiconductor die that contains wire bond connections, possibly with an optical element, or a thermal, mechanical, or electrical interface. LED Component, LED Device, or LED Package does not contain an LED Driver (Power Source) and is not connected directly to the branch circuit.</p> <p>LED Control Circuitry is electronic components located between the Power Source (LED Driver) and the LED Component, or LED Device, or LED Package designed to limit voltage and current, to dim, to switch or otherwise control the electrical energy to the LED. The circuitry does not include a Power Source.</p> <p>LED Driver is a power source with integral LED control circuitry designed to meet the specific requirements of an LED lamp, an LED array, or an LED Module. Typically LED Driver (Power Source) contains the LED Control Circuitry.</p> <p>LED Lamp is an LED Component, LED Device, or LED Package and other optical, thermal, mechanical and electrical (LED Control Circuitry) components with an integrated LED Driver (Power Source) and a standardized base that is designed to connect to the branch circuit via a standardized base, lamp holder, or socket.</p> <p>In North America, “a standardized base” refers to an ANSI standard base. In the U.S. “branch circuit” is used to describe the “mains voltage” in IEC documents.</p> <p>Note: Non-integrated type of LED Lamp should not be defined, it is a LED Module.</p> <p>LED Light Engine with Integral Heat Sink (or LED Light Source System) is a subsystem of an LED Luminaire that includes one or more LED Components, LED Devices or LED Packages, an LED Array, or LED Module; an LED Driver (Power Source); electrical and mechanical interfaces; and an integral heat sink to provide thermal dissipation. An LED Source System may be designed to accept additional components that provide aesthetic, optical, and environmental control (other than thermal dissipation). An LED Source System with standardized base is an LED Lamp.</p> <p>LED Luminaire is a complete LED lighting unit</p>

Term	Definition
	<p>consisting of a light source and driver together with parts to distribute light, to position and protect the light source, and to connect the light source to a branch circuit. The light source itself may be an LED Components, LED Packages or LED Devices, LED Array, an LED Module, an LED Source System, or an LED Lamp. The LED Luminaire is intended to be connected directly to a branch circuit.</p> <p>LED Module is a component part of an LED Source System that includes one or more LED Components, LED Devices or LED Packages, possibly with optical elements and additional thermal, mechanical, and electrical (LED Control Circuitry) interfaces that are connected to the load side of LED Drive (Power Source). The LED Module does not contain a power source. An LED Array is equivalent to an LED Module.</p>

Term	Definition
<u>LIGHTING</u>	<p><u>Definitions include the following:</u></p> <p><u>Accent Light is directional lighting designed to highlight or spotlight objects. It can be recessed, surface mounted, or mounted to a pendant, stem, or track.</u></p> <p><u>Chandelier is a ceiling-mounted, close-to-ceiling, or suspended decorative luminaire that uses glass, crystal, ornamental metals, or other decorative material and that typically is used in hotel/motels, restaurants, or churches as a significant element in the interior architecture.</u></p> <p><u>Compact Fluorescent Lamp is a fluorescent lamp less than 9 inches long, with a small diameter glass tube (T5 or less) that is folded, bent, or bridged to create a long discharge path in a small volume. The lamp designs generally include an amalgam and a cold chamber, or a cold spot, to control the mercury vapor pressure and light output.</u></p> <p><u>Decorative Lighting is lighting used in a decorative manner that does not serve as display lighting or general lighting.</u></p> <p><u>Display Lighting is lighting confined to the area of a display that provides a higher level of illuminance than the level of surrounding ambient illuminance.</u></p> <p><u>General Lighting is lighting designed to provide a substantially uniform level of illumination throughout an area, exclusive of any provision for special visual tasks or decorative effect. When designed for lower-than-task illuminance used in conjunction with other specific task lighting systems, it is also called "ambient" lighting.</u></p> <p><u>GU-24 is the designation of a lamp holder and socket configuration, based on a coding system by the International Energy Consortium, where "G" indicates the broad type of two or more projecting contacts, such as pins or posts, "U" distinguishes between lamp and holder designs of similar type but that are not interchangeable due to electrical or mechanical requirements, and "24" indicates 24 millimeters center to center spacing of the electrical contact posts.</u></p> <p><u>Lantern is an outdoor luminaire that uses an electric lamp to replicate a pre-electric lantern, which used a flame to generate light.</u></p> <p><u>Light Emitting Diode (LED) definitions used in Title 24 Part 6 are in section 6.8 of ANSI/IES RP-16-10.</u></p>

Term	Definition
	<p><u>Luminaire</u> is a complete lighting unit consisting of a lamp(s) and the parts designed to distribute the light, to position and protect the lamp(s), and to connect the lamp(s) to the power supply.</p> <p><u>Lumen Maintenance</u> is a lighting control strategy to provide a precise constant level of lighting from a lighting system regardless of the age of the lamps or the maintenance of the luminaires.</p> <p><u>Marquee lighting</u> is a permanent lighting system consisting of one or more rows of many small lights, including light emitting diodes (LEDs), or fiber optic lighting, attached to a canopy.</p> <p><u>Ornamental lighting</u> for compliance with Title 24, Part 6 is the following:</p> <p style="padding-left: 40px;"><u>Luminaires</u> installed outdoor which are rated for 100 watts or less that are post-top luminaires, lanterns, pendant luminaires, chandeliers, and marquee lighting.</p> <p style="padding-left: 40px;"><u>Luminaires</u> installed indoor that are chandeliers, sconces, lanterns, neon and cold cathode, light emitting diodes, theatrical projectors, moving lights, and light color panels when used in a decorative manner that does not serve as display lighting or general lighting.</p> <p><u>Pendant</u> is a mounting method in which the luminaire is suspended from above.</p> <p><u>Permanently Installed lighting</u> includes all luminaires attached to the inside or outside of a building or site, including track and flexible lighting system; lighting attached to walls, ceilings, columns, inside or outside of permanently installed cabinets, internally illuminated case work, mounted on poles, in trees, or in the ground; attached to ceiling fans and integral to exhaust fans that are other than exhaust hoods for cooking equipment. Permanently installed luminaires may have either plug-in or hardwired connections for electric power. Permanently installed lighting does not include portable lighting or lighting that is installed by the manufacturer in refrigerators, stoves, microwave ovens, exhaust hoods for cooking equipment, refrigerated cases, vending machines, food preparation equipment, and scientific and industrial equipment.</p> <p><u>Portable Lighting</u> is lighting with plug-in connections for electric power that is table and freestanding floor lamps, attached to modular furniture, workstation task lights, lights attached to workstation panels, movable displays, and other equipment that is not permanently installed lighting.</p>

Term	Definition
	<p><u>Post top luminaire</u> is an outdoor luminaire that is mounted directly on top of a lamp-post.</p> <p><u>Precision Lighting</u> is task lighting for general commercial or industrial work of low contrast, fine detail, or fast moving objects.</p> <p><u>Task Lighting</u> is lighting that is designed specifically to illuminate a task location, and that is generally confined to the task location.</p> <p><u>Temporary Lighting</u> is a lighting installation with plug-in connections that does not persist beyond 60 consecutive days or more than 120 days per year.</p> <p><u>Track Lighting</u> is a system that includes small luminaires and a track, rails, or cables that are designed to provide both mounting and deliver electric power. Track is generally made of linear extruded aluminum containing copper wires, or may be a low-voltage cable system, to form a continuous electrical raceway. Some varieties can be joined, or cut, and others set into a variety of patterns with connectors. Track is available in line-voltage or low-voltage</p> <p><u>Line-Voltage Track</u> is equipped with luminaires that use line-voltage lamps or are equipped with integral transformers at each luminaire.</p> <p><u>Low-Voltage Track</u> is equipped with remote transformers for use with low-voltage equipment along the entire length of track</p> <p><u>Track Mounted Luminaires</u> are small luminaires designed to be attached at any point along a track lighting system. Track mounted luminaires may be line-voltage or low-voltage.</p> <p><u>Tuning</u> is the ability to set maximum light levels at a lower level than full lighting power, to which the space occupants are generally not aware.</p>
<u>LIGHTING CONTROLS</u>	<p>Include the following:</p> <p><u>Astronomical Time-Switch Control</u> is a lighting control that controls lighting based on the time of day or based on astronomical events such as sunset and sunrise, accounting for geographic location and day of the year.</p> <p><u>Automatic Daylight Control</u> is a lighting control that automatically adjusts lighting levels in response to available daylight. This control uses one or more photosensors to detect changes in daylight illumination and then changes the electric lighting level in response to the daylight changes.</p>

Term	Definition
	<p><u>Automatic Multi-Level Daylight Control</u> is a lighting control that automatically adjusts lighting levels in multiple steps or continuous dimming in response to available daylight. This control uses one or more photosensors to detect changes in daylight illumination and then changes the electric lighting level in response to the daylight changes.</p> <p><u>Automatic Time Switch Control</u> is a lighting control that controls lighting based on the time of day.</p> <p><u>Countdown Timer Switch</u> is a control that turns lights or other loads ON when activated using one or more selectable count-down time periods and then automatically turns lights or other loads OFF when the selected time period had elapsed.</p> <p><u>Daylighting Control</u> is an Automatic Daylighting Control, or a Photo Control.</p> <p><u>Dimmer</u> is a lighting control that varies the current through an electric light in order to control the level of illumination and the energy use.</p> <p><u>Dimmer, Full-Range</u> means varying the light output of lamps over a continuous range from full light output to minimum light output.</p> <p><u>Dimmer, Stepped</u> means varying the light output of lamps in one or more predetermined discrete steps between full light output and OFF.</p> <p><u>Energy Management Control System (EMCS)</u> see ENERGY MANAGEMENT CONTROL SYSTEM</p> <p><u>Lighting Control, Self Contained</u> is a unitary lighting control module where no additional components are required for a fully functional lighting control.</p> <p><u>Lighting Control System</u> is a lighting control where two or more components are required to be installed in the field to provide all of the functionality required to make up a fully functional and compliant lighting control.</p> <p><u>Multi-Level Astronomical Time Switch</u> is an Astronomical Time Switch Control that reduces lighting power in multiple steps.</p> <p><u>Multi-Level Lighting Control</u> is a lighting control that reduces lighting power in multiple steps.</p> <p><u>Multiscene Programmable Control</u> is a lighting control that allows for two or more pre-defined lighting settings, in addition to all-OFF, for two or more groups of luminaires to suit multiple activities in the space, and allows convenient recall of those settings.</p>

Term	Definition
	<p><u>Occupant Sensing Controls</u> are lighting controls which automatically control light as described below, and allow for complete manual operation, and includes the following types:</p> <p><u>Occupant Sensor</u> is used indoors and automatically turns lights OFF when an area is vacated, and automatically turns the lights ON when the area is occupied.</p> <p><u>Motion Sensor</u> is used outdoors and automatically turns lights OFF when an area is vacated, and automatically turns the lights ON when the area is occupied.</p> <p><u>Partial-ON Occupant/Motion/Vacancy Sensor</u> automatically turns lights OFF when an area is vacated, capable of automatically turning ON part of the lighting load and manually turning ON part of the lighting load when an area is occupied.</p> <p><u>Partial-OFF Occupant/Motion/Vacancy Sensor</u> automatically turns OFF part of the lighting load when an area is vacated, and capable of automatically turning ON the lighting load when an area is occupied.</p> <p><u>Vacancy Sensor</u> automatically turns lights OFF when an area is vacated and requires lighting loads to be manually turned ON.</p> <p><u>Part-Night Outdoor Lighting Control</u> is a time or occupancy-based lighting control device or system that reduces or turns off the lighting power to an outdoor luminaire for a portion of the night. An example of a part-night outdoor lighting control would be to dim the lamp halfway through the night, and turn the lamp back up to full output sometime before dawn if needed to address morning commute requirements. Another example may turn the lamp completely off half way through the night.</p> <p><u>Photo Control</u> is an Automatic Daylighting Control that automatically turns lights ON and OFF, or automatically adjusts lighting levels, in response to the amount of daylight that is available. A Photo Control may also be one component of a field assembled lighting system, the component having the capability to provide a signal proportional to the amount of daylight to a Lighting Control System for the purpose of continuously dimming the electric lights.</p> <p><u>Time Switch Control</u> is an Automatic Time Switch Control, Astronomical Time Switch Control, or Multi-Level Astronomical Time Switch Control.</p>

Term	Definition
	<p><u>Track Lighting Integral Current Limiter</u> is a lighting control device in which a current limiter is integral to the end-feed housing of a manufactured line-voltage track lighting system, where the end-feed housing and connecting track are manufactured by the same company to be exclusively used together.</p> <p><u>Track Lighting Supplementary Overcurrent Protection Panel</u> is a listed electrical panel that provides limited overcurrent protection for use only with line voltage track lighting. This limited protection is in addition to the protection provided in the required branch circuit overcurrent protective device, and cannot be used as a substitute for required branch-circuit overcurrent devices, or in place of the required branch-circuit protection.</p>
LIGHTING ZONE	See <i>Outdoor Lighting</i> .
LIQUID LINE	is the refrigerant line that leads from the condenser to the evaporator in a split system air conditioner or heat pump. The refrigerant in this line is in a liquid state and is at an elevated temperature. This line should not be insulated.
LISTED	is equipment, materials, or services included in a list published by an organization that is recognized to have the authority to evaluate and test the equipment, material or services. The organization performs periodic inspection and evaluation to ensure that the listed equipments, material, or services meet identified standards or has been tested and found suitable for a specified purpose. The recognized organizations include but are not limited to the Underwriters Laboratories (UL).
LOCKER/DRESSING ROOM	See <i>Nonresidential Functional Area or Type of Use</i> .
LOUNGE/RECREATION	See <i>Nonresidential Functional Area or Type of Use</i> .
LOW BAY	See <i>Nonresidential Functional Area or Type of Use, General commercial and industrial work</i> .
LOW-E COATING	is a low emissivity metallic coating applied to glazing in fenestration products. See <i>Soft Coat</i> and <i>Hard Coat</i> .
<u>LOW-GWP REFRIGERANT</u>	is a compound used as a heat transfer fluid or gas that is: (A) any compound or blend of compounds, with a GWP Value less than 150; and (B) U.S. EPA Significant New Alternatives Policy (SNAP)-approved; and (C) not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, §82.3 (as amended March 10, 2009).
LOW-RISE ENCLOSED SPACE	is an enclosed space located in a building with 3 or fewer stories.

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Term	Definition
LOW-RISE RESIDENTIAL BUILDING	is a building, other than a hotel/motel that is of Occupancy Group R, Division 1, and is multi-family with three stories or less, or a single family residence of Occupancy Group R, Division 3, or an Occupancy Group U building located on a residential site.
LOW-SLOPED ROOF	is a roof that has a ratio of rise to run of 2:12 or less.
LPG	is liquefied petroleum gas. Propane is one type of LPG.
LUMENS/WATT	is the amount of light available from a given light source (lumens) divided by the power requirement for that light source (watts). The more usable light that a light source provides per watt, the greater its efficacy. See <i>Efficacy</i> .
LUMINAIRE	is a complete lighting unit consisting of a lamp(s) and the parts designed to distribute the light, to position and protect the lamp(s), and to connect the lamp(s) to the power supply; commonly referred to as "lighting fixtures."
MAIN ENTRY LOBBY	See <i>Nonresidential Functional Area or Type of Use, Lobby, Main entry</i> .
MAKEUP AIR	is outdoor air deliberately brought into the building from the outside and supplied to the vicinity of an exhaust hood to replace air, vapor, and contaminants being exhausted. Makeup air is generally filtered and fan-forced, and it may be heated or cooled depending on the requirements of the application. Makeup air may be delivered through outlets integral to the exhaust hood or through outlets in the same room.
MALL	See <i>Nonresidential Functional Area or Type of Use</i> .
MALL BUILDING	is a single building enclosing a number of tenants and occupants wherein two or more tenants have a main entrance into one or more malls.
MANDATORY MEASURES CHECKLIST (MF-1R)	is a form used by the building plan checker and field inspector to verify compliance of the building with the prescribed list of mandatory features, equipment efficiencies and product certification requirements. The documentation author indicates compliance by initialing, checking, or marking N/A (for features not applicable) in the boxes or spaces provided for the designer.
MANUAL	is capable of being operated by personal intervention.
MANUFACTURED DEVICE	is any heating, cooling, ventilation, lighting, water heating, refrigeration, cooking, plumbing fitting, insulation, door, fenestration product, or any other appliance, device, equipment, or system subject to §110.0 through §110.9.
MARQUEE LIGHTING	See <i>Outdoor Lighting</i> .

Term	Definition
MECHANICAL COOLING	is lowering the temperature within a space using refrigerant compressors or absorbers, desiccant dehumidifiers, or other systems that require energy from depletable sources to directly condition the space. In nonresidential, high-rise residential, and hotel/motel buildings, cooling of a space by direct or indirect evaporation of water alone is not considered mechanical cooling.
MECHANICAL HEATING	is raising the temperature within a space using electric resistance heaters, fossil fuel burners, heat pumps, or other systems that require energy from depletable sources to directly condition the space.
MEDICAL AND CLINICAL CARE	See <i>Nonresidential Functional Area or Type of Use</i> .
METAL BUILDING	is a complete integrated set of mutually dependent components and assemblies that form a building, which consists of a steel-framed superstructure and metal skin. This does not include structural glass or metal panels such as in a curtainwall system.
<u>MICRO-CHANNEL CONDENSER</u>	<u>is an air-cooled condenser for refrigeration systems which utilizes multiple small parallel gas flow passages in a flat configuration with unitized fin surface between the gas passages, rather than round tubes arranged at a right angle to separate plate fins.</u>
<u>MINI-SPLIT AIR CONDITIONERS AND HEAT PUMPS</u>	<u>are systems that have a single outdoor section and one or more indoor sections. The indoor sections cycle on and off in unison in response to a single indoor thermostat.</u>
<u>MULTIPLE-SPLIT AIR CONDITIONERS AND HEAT PUMPS</u>	<u>are systems that have two or more indoor sections. The indoor sections operate independently and can be used to condition multiple zones in response to multiple indoor thermostats.</u>
<u>MULTIPLE ZONE SYSTEM</u>	<u>is an air distribution system that supplies air to more than one thermal zone each of which has one or more devices (such as dampers, cooling coils, and heating coils) that regulate airflow, cooling, or heating capacity to the zone.</u>
MIXED OCCUPANCY BUILDING	is a building designed and constructed for more than one type of occupancy, such as a three story building with ground floor retail and second and third floor residential apartments.

Term	Definition
<i>MODEL</i>	<p>is a single floor plan of a dwelling unit design. To be considered the same model; dwelling units shall be in the same subdivision or multi-family housing development and have the same energy designs and features, including the same floor area and volume. For multi-family buildings, variations in the exterior surface areas caused by the location of dwelling units within the building do not cause dwelling units to be considered different models.</p> <p>For purposes of establishing HERS sampling groups, variations in the basic floor plan layout, energy design, compliance features, zone floor area, or zone volume, that do not change the HERS features to be tested, the heating or cooling capacity of the HVAC unit(s), or the number of HVAC units specified for each dwelling unit, shall not cause dwelling units to be considered different models.</p>
<i>MODELING ASSUMPTIONS</i>	are the conditions (such as weather conditions, thermostat settings and schedules, internal gain schedules, etc.) that are used for calculating a building's annual energy consumption as specified in the Alternative Calculation Methods Manuals.
<i>MOTION SENSOR, LIGHTING</i>	is a device that automatically turns lights off soon after an area is vacated. The term motion sensor applies to a device that controls outdoor lighting systems. When the device is used to control indoor lighting systems, it is termed an occupant sensor. The device also may be called an occupancy sensor, occupant-sensing device, or vacancy sensor.
<i>MOVABLE SHADING DEVICE</i>	See <i>Operable Shading Device</i> .
<i>MULLION</i>	<p>is a vertical framing member separating adjoining window or door sections.</p> <p>See <i>Dividers</i>.</p>
<i>MULTI-FAMILY DWELLING UNIT</i>	is a dwelling unit of occupancy type R, as defined by the CBC, sharing a common wall and/or ceiling/floor with at least one other dwelling unit.
<i>MULTI-LEVEL LIGHTING CONTROL</i>	is a lighting control that reduces lighting power in multiple steps while maintaining a reasonably uniform level of illuminance throughout the area controlled.
<i>MULTIPLE ZONE</i>	is a supply fan (and optionally a return fan) with heating and/or cooling heat exchangers (e.g. DX coil, chilled water coil, hot water coil, furnace, electric heater) that serves more than one thermostatic zone. Zones are thermostatically controlled by features including but not limited to variable volume, reheat, recool and concurrent operation of another system.
<i>MULTISCENE PROGRAMMABLE SYSTEM</i>	is a lighting control device that has the capability of setting light levels throughout a continuous range, and that has pre-established settings within the range.
<i>MUNTINS</i>	See <i>Dividers</i> .

Term	Definition
MUSEUM	See <i>Nonresidential Functional Area or Type of Use</i> .
<u>NET EXHAUST FLOW RATE</u>	<u>is the exhaust flow rate for a hood, minus any internal discharge makeup air flow rate.</u>
NEWLY CONDITIONED SPACE	is any space being converted from unconditioned to directly conditioned or indirectly conditioned space. Newly conditioned space must comply with the requirements for an addition. See §14 <u>1.09</u> for nonresidential occupancies and §15 <u>0.2</u> for residential occupancies.
NEWLY CONSTRUCTED BUILDING	is a building that has never been used or occupied for any purpose.
NFRC	is the National Fenestration Rating Council. This is a national organization of fenestration product manufacturers, glazing manufacturers, manufacturers of related materials, utilities, state energy offices, laboratories, home builders, specifiers (architects), and public interest groups. This organization is designated by the Commission as the Supervisory Entity, which is responsible for rating the U-factors and solar heat gain coefficients of manufactured fenestration products (i.e., windows, skylights, glazed doors) that must be used in compliance calculations. See also <i>Fenestration Area and Fenestration Product</i> .
NFRC 100	is the National Fenestration Rating Council document entitled "NFRC 100: Procedure for Determining Fenestration Product U-factors." 2007; NFRC 100 includes procedures for site fenestration formerly included in a separate document, NFRC 100-SB)
NFRC 200	is the National Fenestration Rating Council document entitled "NFRC 200: Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence." (2007)
NFRC 400	is the National Fenestration Rating Council document entitled "NFRC 400: Procedure for Determining Fenestration Product Air Leakage." (1995 or January 2002)
<u>NON-DUCTED SYSTEM</u>	<u>Is an air conditioner or heat pump that is designed to be permanently installed equipment and directly heats or cools air within the conditioned space using one or more indoor coils that are mounted on room walls and/or ceilings. The unit may be of a modular design that allows for combining multiple outdoor coils and compressors to create one overall system.</u>
NONDEPLETABLE SOURCES	is defined as energy that is not obtained from depletable sources. Also referred to as renewable energy, including solar and wind power. See <i>Energy Obtained from Nondepletable Sources</i> .

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Term	Definition
NONRESIDENTIAL BUILDING	<p>is any building which is a Group A, B, E, F, H, M, S or U; Occupancy (when the Group U Occupancy is on a nonresidential site).</p> <p>NOTE: Requirements for high-rise residential buildings and hotels/motels are included in the nonresidential sections of Title 24, Part 6.</p>
<u>NONRESIDENTIAL BUILDING OCCUPANCY TYPES</u>	<p><u>are buildings in which a minimum of 90 percent of the area functions as one of the following:</u></p> <p><u>Auditorium Building is a public building with fixed seating used for public meetings or gatherings, not specifically for the viewing of dramatic performances.</u></p> <p><u>Classroom Building is a building used by an organization that provides instruction to students for which a minimum of 90 percent of the building floor area is classrooms, educational workshops, and educational labs; and supporting corridors, stairways, and restrooms.</u></p> <p><u>Commercial and Industrial Storage Building is a building used for storing items.</u></p> <p><u>Convention Center Building is a building for which the primary function is for meetings, conventions and multiple purposes, and that have neither fixed seating nor fixed staging.</u></p> <p><u>Financial Institution Building is a public building for conducting financial transactions including the custody, loan, exchange, or issue of money, for the extension of credit, and for facilitating the transmission of funds.</u></p> <p><u>General Commercial and Industrial Work Building is a building for an art, craft, assembly or manufacturing operation is performed.</u></p> <p><u>Grocery Store Building is a building for the sale of foodstuffs requiring additional preparation prior to consumption.</u></p> <p><u>Library Building is a building which is primarily a repository for literary materials, such as books, periodicals, newspapers, pamphlets and prints, kept for reading or reference.</u></p> <p><u>Medical Buildings and Clinic Buildings are non-"I" occupancy buildings where medical or clinical care is provided, does not provide overnight patient care, and is used to provide physical and mental care through medical, dental, or psychological examination and treatment.</u></p> <p><u>Office Building is a building of CBC Group B Occupancy which is other than a restaurant.</u></p>

Term	Definition
	<p>Parking Garage Building is a building for the purpose of parking vehicles, which consists of at least a roof over the parking area enclosed with walls on all sides. Parking garages may have fences, rails, partial walls, or other barriers in place of one or more walls. The building has an entrance(s) and exit(s), and includes areas for vehicle maneuvering to reach the parking spaces. If the roof of a parking structure is also used for parking, the section without an overhead roof is considered a parking lot instead of a parking garage.</p> <p>Religious Facility Building is a building in which the primary function is for assembly of people to worship.</p> <p>Restaurant Building is a building in which the primary function is a food establishment as defined in Section 27520 of the Health and Safety Code.</p> <p>School Building is a building that is used by an organization that provides instruction to students, which is not a Classroom Building as defined in Section 100.1, and may include an auditorium, gymnasium, kitchen, library, multi-purpose room, dining and cafeteria, student union, or maintenance staff workroom. A maintenance or storage building is not a school building.</p> <p>Theater Building is a building in which the primary function is assembly, having tiers of rising seats or steps for the viewing of motion pictures, dramatic performances, lectures, musical events and similar live performances.</p>
NONRESIDENTIAL COMPLIANCE MANUAL	is the manual developed by the Commission, under Section 25402.1 (e) of the Public Resources Code, to aid designers, builders, and contractors in meeting the energy efficiency requirements for nonresidential, high-rise residential, and hotel/motel buildings.
NONRESIDENTIAL FUNCTION AREAS OR TYPE OF USE	<p>is one of the include the following:</p> <p>Aisle Way is a warehouse facility term describing a long, usually narrow space between storage racks.</p> <p>Atrium is a large-volume space created by openings connecting two or more stories and is used for purposes other than an enclosed stairway, an elevator hoistway, an escalator opening, or as a utility shaft for plumbing, electrical, air-conditioning or other equipment and is not a mall.</p> <p>Auditorium Room is the part of a public building where an audience sits in fixed seating, or a room, area, or building with fixed seats used for public meetings or gatherings not specifically for the viewing of dramatic performances.</p> <p>Auto Repair is the portion of a building a room or area used to repair automotive equipment and/or vehicles, exchange parts, and may include work using</p>

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Term	Definition
	<p>an open flame or welding equipment.</p> <p>Beauty Salon is a room or area in which the primary activity is manicures, pedicures, facials, or the cutting or styling of hair. Also <u>may be</u> known as <u>a</u> beauty shop or beauty parlor.</p> <p>Civic mMeeting pPlace is a <u>room or area which is a</u> city council or board of supervisors meeting chamber, courtroom, or other official meeting <u>spacearea</u> accessible to the public.</p> <p>Classroom Building is a building or group of buildings that is predominately classrooms used by an organization that provides instruction to students, which may include corridors and stairways, restrooms and small storage closets, faculty offices, and workshops and labs. A classroom building does not include buildings that are not predominantly classroom, including auditorium, gymnasium, kitchen, library, multi-purpose, dining and cafeteria, student union, maintenance staff workroom, or storage buildings.</p> <p>Classroom, lLecture, tTraining, vVocational rRoom is a room or area where an audience or class receives instruction.</p> <p>Commercial and iIndustrial sStorage is a room, <u>areaor area</u>, <u>or building</u> used for storing items.</p> <p>Convention, conference, multipurpose and meeting centers is an assembly room, area, or building that is used for meetings, conventions and multiple purposes, including, but not limited to, dramatic performances, and that has neither fixed seating nor fixed staging.</p> <p>Corridor is a passageway or route into which compartments or rooms open.</p> <p>Dining is a room or <u>rooms-area in a restaurant or hotel/motel (other than guest rooms)</u> where meals that are served to the customers will be consumed.</p> <p>Dormitory is a building consisting of multiple sleeping quarters and having interior common areas such as dining rooms, reading rooms, exercise rooms, toilet rooms, study rooms, hallways, lobbies, corridors, and stairwells, other than high-rise residential, low-rise residential, and hotel/motel occupancies.</p> <p>Electrical/mMechanical/tTelephone rRoom is a room in which the building's electrical switchbox or control panels, telephone switchbox, and/or HVAC controls or equipment is located.</p> <p>Exercise eCenter/gGymnasium is a room or <u>buildingarea</u> equipped for gymnastics, exercise equipment, or indoor athletic activities.</p> <p>Exhibit is a room or area that <u>has for its primary purpose is used for</u> exhibitions, <u>having that has</u> neither fixed seating nor fixed staging. <u>An exhibit</u></p>

Term	Definition
	<p>does not include a gallery or other place where art is for sale. An exhibit does not include a lobby, conference room, or other occupancies where the primary function is not exhibitions.</p> <p>Financial institution is a public establishment used for conducting financial transactions including the custody, loan, exchange, or issue of money, for the extension of credit, and for facilitating the transmission of funds.</p> <p>Financial Transactions Area is a room or area for the tellers area, work stations, and customer waiting areas to complete financial transactions. Financial transaction areas do not include private offices, hallways, restrooms, or other support areas.</p> <p>General Commercial and Industrial Work Area is a room or area, or building in which an art, craft, assembly or manufacturing operation is performed.</p> <p>High bay: Where the luminaires are 25 feet or more above the floor.</p> <p>Low bay: Where the luminaires are less than 25 feet above the floor.</p> <p>Precision: Where involving visual tasks of small size or fine detail such as electronic assembly, fine woodworking, metal lathe operation, fine hand painting and finishing, egg processing operations, or tasks of similar visual difficulty are done.</p> <p>Grocery Sales Area is a room, or area, or building that has as its primary purpose the sale of foodstuffs requiring additional preparation prior to consumption.</p> <p>Grocery store is a building that has as its primary purpose the sale of foodstuffs requiring additional preparation prior to consumption.</p> <p>Hotel Function Area is a hotel room or area such as a hotel ballroom, meeting room, exhibit hall or conference room, together with pre-function areas and other spaces ancillary to its function.</p> <p>Housing, Public and Commons Areas is housing other than Occupancy Group I that are living quarters. Commons areas may include dining, reading, study, library or other community spaces and/or medical treatment or hospice facilities.</p> <p>Multi-family: A multi-family building contains multiple dwelling units that share common walls and may also share common floors or ceilings (apartments).</p> <p>Dormitory: A space in a building where group sleeping accommodations are provided in one room, or in a series of closely associated rooms, for persons not members of the same family group, under joint occupancy and single management, as in college dormitories or fraternity houses.</p>

Term	Definition
	<p>Senior housing: Is specifically for habitation by seniors, including but not limited to independent living quarters, and assisted living quarters.</p> <p>Kitchen/Food pPreparation is a room or area with cooking facilities and/or an area where food is prepared.</p> <p>Laboratory, Scientific is a room or area where research, experiments, and measurement in medical and physical sciences are performed requiring examination of fine details. The area may include workbenches, countertops, scientific instruments, and associated floor spaces. Scientific laboratory does not refer to film, computer, and other laboratories where scientific experiments are not performed.</p> <p>Laundry is a placeroom or area where laundering activities occur.</p> <p>Library Area is a <u>room or area with a</u> repository for literary materials, such as books, periodicals, newspapers, pamphlets and prints, kept for reading or reference. Forma</p> <p>Reading aAreas: Is a library facility term describing room or <u>areas within a prescribed building space in a library</u> containing tables, chairs, or desks for library patrons to use for the purpose of reading books and other reference documents. Library reading areas include reading, circulation, and checkout areas. Reading areas do not include private offices, meeting, photocopy, or other rooms not used specifically for reading by library patrons.</p> <p>Stacks Area: Is a room or area in a library facility term describing a with large grouping of shelving sections within a prescribed building space. Stack aisles include pedestrian paths located in stack areas. Book stack aisle lighting is typically a central aisle luminaire distributing light to stack faces on both sides of an aisle.</p> <p>Laboratory, Scientific is a space or facility where research, experiments, and measurement in medical and physical sciences are performed requiring examination of fine details. The space may include workbenches, countertops, scientific instruments, and associated floor spaces. Scientific laboratory does not refer to film, computer, and other laboratories where scientific experiments are not performed.</p> <p>Lobby,</p> <p>Hotel: Is the contiguous areospace in a hotel/motel between the main entrance and the front desk, including reception, waiting and seating areas. Forma Hyper</p> <p>Main eEntry: Is the contiguous spacearea in buildings other than hotel/motel that is directly</p>

Term	Definition
	located by the main entrance of the building through which persons must pass, including reception, waiting and seating areas.
	Locker/dDressing rRoom is a room or area for changing clothing, sometimes equipped with lockers.
	Lounge/rRecreation is a room <u>or area</u> used for leisure activities which may be associated with a restaurant or bar.
	Mall is a roofed or covered common pedestrian area within a mall building that serves as access for two or more tenants.
	Medical and eClinical eCare Area is a non “I” occupancy room or area in a building that does not provide overnight patient care and that is used to provide physical and mental care through medical, dental, or psychological examination and treatment, including, but not limited to, laboratories and treatment spaces.
	Medical buildings and clinics is a building where medical and clinical care is provided.
	Museum is a space <u>room or area</u> in which the primary function is the care or exhibit of works of artistic, historical, or scientific value. A museum does not include a gallery or other place where art is for sale. A museum does not include a lobby, conference room, or other occupancies where the primary function is not the care or exhibit of works of artistic, historical, or scientific value.
	Office Area is a room, area, or building of CBC Group B Occupancy other than restaurants.
	<u>Open Area is a warehouse facility term describing a large unobstructed area that is typically used for the handling and temporary storage of goods.</u>
	Parking gGarage Area is a covered building or structure for the purpose of parking vehicles, which consists of at least a roof over the parking area enclosed with walls on all sides. Parking garages may have fences, rails, partial walls, or other barriers in place of one or more walls. The structure has an entrance(s) and exit(s), and includes areas for vehicle maneuvering to reach the parking spaces. If the roof of a parking structure is also used for parking, the section without an overhead roof is considered a parking lot instead of a parking garage. <u>Parking parages may include the following areas:</u>
	<u>Daylight Transition Zone is the interior path of travel for vehicles to enter a parking garage as needed to transition from exterior daylight levels to interior light levels. Daylight Transition Zones only include the path of vehicular travel and do not include adjacent Parking Areas.</u>
	<u>Dedicated Ramps are driveways specifically for</u>

Term	Definition
	<p><u>the purpose of moving vehicles between floors of a parking garage and which have no adjacent parking. Dedicated ramps do not include sloping floors of a parking structure, which are considered Parking Areas.</u></p> <p>Parking Areas: <u>Are areas of a parking garage used only for the purpose of parking and maneuvering of vehicles on a single floor.</u> <u>Parking areas include sloping floors of a parking structure. Parking areas do not include Daylight Transition Zones, Dedicated Ramps, or and which is not the roof of a parking structure.</u></p> <p>Ramps and Entries: Parking ramps are driveways for the purpose of moving vehicles between floors of a parking garage. Parking entries are driveways for the purpose of vehicles entering into a parking garage.</p> <p>Religious facility is a building in which the primary function is for an assembly of people to worship. Religious facilities do not include classroom, housing, or gymnasium buildings.</p> <p>Religious wWorship Area is a room, or area, or building in which the primary function is for an assembly of people to worship. Religious worship does not include classrooms, offices, or other areas in which the primary function is not for an assembly of people to worship.</p> <p>Restaurant is a room, area, or building that is a food establishment as defined in Section 27520 of the Health and Safety Code.</p> <p>Restroom is a room or suite of rooms providing personal facilities such as toilets and washbasins.</p> <p>Retail mMerchandise sSales Area is a room, or area, or building in which the primary activity is the sale of merchandise.</p> <p>School is a building or group of buildings that is used by an organization that provides instruction to students, which is predominately classroom buildings but may also include auditorium, gymnasium, kitchen, library, multi-purpose rooms, dining and cafeteria, student union, maintenance staff workroom, and small storage spaces.</p> <p>Stairs is a series of steps providing passage from one level of a building to another, including escalators.</p> <p><u>Stairwell is a vertical shaft in which stairs are located.</u></p> <p>Support aArea is a room or area used as a passageway, utility room, storage space, or other type of space associated with or secondary to the function of an occupancy that is listed in these regulations.</p> <p>Tenant lLease sSpace is a portion of room or area in a building intended for lease for which a specific tenant is not identified at the time of permit application.</p>

Term	Definition
	<p>Theater Area</p> <p>Motion pPicture: Is an assembly room <u>or area, a hall, or a building</u> with tiers of rising seats or steps for the showing of motion pictures.</p> <p>Performance: Is an assembly room <u>or area, a hall, or a building</u> with tiers of rising seats or steps for the viewing of dramatic performances, lectures, musical events and similar live performances.</p> <p>Transportation fFunction Area: is the ticketing area, waiting area, baggage handling areas, concourse, or other areas not covered by primary functions in Standards Table 146-G in an airport terminal, bus or rail terminal or station, subway or transit station, or a marine terminal.</p> <p>Videoconferencing Sstudio is a room with permanently installed videoconferencing cameras, audio equipment, and playback equipment for both audio-based and video-based two-way communication between local and remote sites.</p> <p>Vocational Arearoom is a room <u>or area</u> used to provide training in a special skill to be pursued as a trade.</p> <p>Waiting aArea is an area other than a hotel lobby or main entry lobby normally provided with seating and used for people waiting.</p> <p>Wholesale sShowroom is a room <u>or area</u> where samples of merchandise are displayed.</p>
NONSTANDARD PART LOAD VALUE (NPLV)	is a single-number part-load efficiency figure of merit for chillers referenced to conditions other than IPLV conditions. (See "Integrated Part Load Value")
NORTH-FACING	See <i>Orientation</i> .
NSHP GUIDEBOOK	is the California Energy Commission document entitled "New Solar Home Partnership Guidebook" that is in effect at the time of application for the building permit.
OCCUPANT SENSOR, LIGHTING	is a device that automatically turns lights off soon after an area is vacated. The term occupant sensor applies to a device that controls indoor lighting systems. When the device is used to control outdoor lighting systems, it is termed a motion sensor. The device also may be called an occupancy sensor, occupant-sensing device, or vacancy sensor.
<u>OCCUPIABLE SPACE</u>	<u>is any enclosed space inside the pressure boundary and intended for human activities, including, but not limited to, all habitable spaces, toilets, closets, halls, storage and utility areas, and laundry areas.</u>
OFFICE	See <i>Nonresidential Functional Area or Type of Use</i> .

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Term	Definition
OPEN COOLING TOWER	is an open, or direct contact cooling tower which exposes water directly to the cooling atmosphere, thereby transferring the source heat load from the water directly to the air by a combination of heat and mass transfer.
OPERABLE SHADING DEVICE	is a device at the interior or exterior of a building or integral with a fenestration product, which is capable of being operated, either manually or automatically, to adjust the amount of solar radiation admitted to the interior of the building.
ORIENTATION, CARDINAL	is one of the four principal directional indicators, north, east, south, and west, which are marked on a compass. Also called cardinal directions.
ORIENTATION, EAST-FACING	is oriented to within 45 degrees of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).
ORIENTATION, NORTH-FACING	is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).
ORIENTATION, SOUTH-FACING	is oriented to within 45 degrees of true south including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).
ORIENTATION, WEST-FACING	is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).
ORNAMENTAL CHANDELIERS	are ceiling-mounted, close to ceiling, or suspended decorative luminaires that use glass, crystal, ornamental metals, or other decorative material and that typically are used in hotel/motels, restaurants, or churches as a significant element in the interior architecture.
ORNAMENTAL LIGHTING	See <i>Outdoor Lighting</i> .
OUTDOOR AIR (OUTSIDE AIR)	is air taken from outdoors and not previously circulated in the building.
OUTDOOR LIGHTING	<p><u>Is electrical lighting used to illuminate outdoor areas, and includes the following areas:</u></p> <p>Building entrance is any operable doorway in or out of a building, including overhead doors.</p> <p>Building façade is the exterior surfaces of a building, not including horizontal roofing, signs, and surfaces not visible from any reasonable viewing location.</p> <p>Canopy is a permanent structure, other than a parking garage as defined in §100.1, consisting of a roof and supporting building elements, with the area beneath at least partially open to the elements. A canopy may be freestanding or attached to surrounding structures. A canopy roof may serve as the floor of a structure above.</p> <p>Carport is a covered, open-sided structure used</p>

Term	Definition
	<p>solely for the purpose of parking vehicles, consisting of a roof over the parking area. Typically, carports are free-standing or projected from the side of the building and are only two or fewer car lengths deep.</p> <p>Hardscape is an improvement to a site that is paved or has other structural features, including but not limited to, curbs, plazas, entries, parking lots, site roadways, driveways, walkways, sidewalks, bikeways, water features and pools, storage or service yards, loading docks, amphitheaters, outdoor sales lots, and private monuments and statuary.</p> <p>Landscape lighting is lighting that is recessed into or mounted on the ground, paving, or raised deck, which is mounted less than 42 inches above grade or mounted onto trees or trellises, and that is intended to be aimed only at landscape features.</p> <p>Lantern is an ornamental outdoor luminaire that uses an electric lamp to replicate a pre-electric lantern, which used a flame to generate light.</p> <p>Lighting zone is a geographic area designated by the California Energy Commission that determines requirements for outdoor lighting, including lighting power densities and specific control, equipment or performance requirements. Lighting zones are numbered LZ1, LZ2, LZ3, and LZ4.</p> <p>Marquee lighting is a permanent lighting system consisting of one or more rows of many small lights, including light emitting diodes (LEDs), or fiber optic lighting, attached to a canopy.</p> <p>Ornamental lighting is post-top luminaires, lanterns, pendant luminaires, chandeliers, and marquee lighting.</p> <p>Outdoor lighting is all electrical lighting for parking lots, signs, building entrances, outdoor sales areas, outdoor canopies, landscape lighting, lighting for building facades and hardscape lighting.</p> <p>Outdoor sales frontage is the portion of the perimeter of an outdoor sales area immediately adjacent to a street, road, or public sidewalk.</p> <p>Outdoor sales lot is an uncovered paved area used exclusively for the display of vehicles, equipment or other merchandise for sale. All internal and adjacent access drives, walkway areas, employee and customer parking areas, vehicle service or storage areas are not outdoor sales lot areas, but are considered hardscape.</p> <p>Parking lot is an uncovered area for the purpose of parking vehicles. Parking lot is a type of hardscape.</p> <p>Paved area is an area that is paved with concrete, asphalt, stone, brick, gravel, or other improved wearing surface, including the curb.</p> <p>Pendant is a mounting method in which the luminaire</p>

Term	Definition
	<p>is suspended from above.</p> <p>Post Top Luminaire is an ornamental outdoor luminaire that is mounted directly on top of a lamp post.</p> <p>Principal viewing location is anywhere along the adjacent highway, street, road or sidewalk running parallel to an outdoor sales frontage</p> <p>Public monuments are statuary, buildings, structures, and/or hardscape on public land.</p> <p>Sales canopy is a canopy specifically to cover and protect an outdoor sales area.</p> <p>Stairways and Ramps. Stairways are one or more flights of stairs with the necessary landings and platforms connecting them to form a continuous and uninterrupted passage from one level to another. An exterior stairway is open on at least one side, except for required structural columns, beams, handrails and guards. The adjoining open areas shall be either yards, courts or public ways. The other sides of the exterior stairway need not be open. Ramps are walking surfaces with a slope steeper than 5 percent.ⁱ</p> <p>Vehicle service station is a gasoline, natural gas, diesel, or other fuel dispensing station.</p>
<u>OUTDOOR LIGHTING ZONE</u>	<p>is a geographic area designated by the California Energy Commission that determines requirements for outdoor lighting, including lighting power densities and specific control, equipment or performance requirements. Lighting zones are numbered LZ1, LZ2, LZ3, and LZ4.</p>
OUTDOOR SALES FRONTAGE	See <i>Outdoor Lighting</i> .
OUTDOOR SALES LOT	See <i>Outdoor Lighting</i> .
OUTSIDE AIR	See <i>Outdoor Air</i> .
PACKAGED AIR CONDITIONER OR HEAT PUMP	is an air conditioner or heat pump that combines both the condenser and air handling capabilities in a single enclosure or package.
PANEL SIGN	See <i>Sign, Cabinet</i> .
<u>PARALLEL FAN-POWERED TERMINAL UNIT</u>	<p>is a terminal unit that combines a VAV damper in parallel with a fan that only runs when the terminal unit is providing heating to the space.</p>
PARKING GARAGE	See <i>Nonresidential Functional Area or Type of Use</i> .
PARKING LOT	See <i>Outdoor Lighting</i> .
PART 6	<p>is Title 24, Part 6 of the California Code of Regulations.</p> <p>See <i>Building Energy Efficiency Standards</i>.</p>
<u>PART-LOAD OPERATION</u>	<p>occurs when a loaded air compressor is operating below its maximum rated capacity.</p>

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Term	Definition
<u>PARTICLE SIZE EFFICIENCY</u>	is the fraction (percentage) of particles that are captured on air filter equipment as determined during rating tests conducted in accordance with ASHRAE Standard 52.2 or AHRI Standard 680. Particle Size Efficiency is measured in three particle size ranges: 0.3-1.0, 1.0-3.0, 3.0-10 microns.
PARTY PARTITION	is a wall, floor, or ceiling that separates the conditioned spaces of two different tenants.
PAVED AREA	See <i>Outdoor Lighting</i> .
PENDANT	See <i>Outdoor Lighting</i> .
PERM	is equal to 1 grain of water vapor transmitted per 1 square foot per hour per inch of mercury pressure difference.
PERMANENTLY ATTACHED	is attached with fasteners that require additional tools to remove (as opposed to clips, hooks, latches, snaps, or ties).
PERMANENTLY INSTALLED LIGHTING	includes all luminaires attached to the inside or outside of a building or site, including track and flexible lighting system; lighting attached to walls, ceilings, columns, inside or outside of permanently installed cabinets, internally illuminated case work, mounted on poles, in trees, or in the ground; attached to ceiling fans and integral to exhaust fans that are other than exhaust hoods for cooking equipment. Permanently installed luminaires may have either plug-in or hardwired connections for electric power. Permanently installed lighting does not include portable lighting or lighting that is installed by the manufacturer in refrigerators, stoves, and microwave ovens, exhaust hoods for cooking equipment, refrigerated cases, vending machines, food preparation equipment, and scientific and industrial equipment.
PHOTOCONTROL	is an electric device that detects changes in illumination levels then controls lighting load at predetermined illumination levels.
PLENUM	is an air compartment or chamber, including uninhabited crawl space, areas above a ceiling or below a floor, including air spaces below raised floors of computer/data processing centers, or attic spaces, to which one or more ducts are connected and which forms part of either the supply-air, return-air or exhaust air system, other than the occupied space being conditioned.
POOLS, ANSI/NSPI-5	is the American National Standards Institute and National Spa and Pool Institute document entitled "American National Standard for Residential Inground Swimming Pools" 2003 (ANSI/NSPI-5 2003).

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Term	Definition
<i>POOLS, AUXILIARY POOL LOADS</i>	are features or devices that circulate pool water in addition to that required for pool filtration, including, but not limited to, solar pool heating systems, filter backwashing, pool cleaners, waterfalls, fountains, and spas.
<i>POOLS, BACKWASH VALVE</i>	is a diverter valve designed to backwash filters located between the circulation pump and the filter, including, but not limited to, slide, push-pull, multi-port, and full-flow valves.
<i>POOLS, MULTI-SPEED PUMP</i>	is a pump capable of operating at two (2) or more speeds and includes two-speed and variable-speed pumps.
<i>POOLS, NSF/ANSI 50</i>	is the NSF International (formerly National Sanitation Foundation) Standard and American National Standards Institute document entitled "Circulation System Components and Related Materials for Swimming Pools, Spas/Hot Tubs" 2005 (NSF/ANSI 50 – 2005).
<i>POOLS, RESIDENTIAL</i>	are permanently installed residential in-ground swimming pools intended to use by a single-family home for noncommercial purposes and with dimensions as defined in ANSI/NSPI-5.
<i>POOR QUALITY LIGHTING TASKS</i>	are visual tasks that require Illuminance Category E or greater, because of the choice of a writing or printing method that produces characters that are of small size or lower contrast than good quality alternatives that are regularly used in offices.
<i><u>PORTABLE LIGHTING</u></i>	<i>is lighting with plug-in connections for electric power that is table and freestanding floor lamps, attached to modular furniture, workstation task lights, lights attached to workstation panels, movable displays, and other equipment that is not permanently installed lighting.</i>
<i>POST TOP LUMINAIRE</i>	See <i>Outdoor Lighting</i> .
<i>PRECISION COMMERCIAL OR INDUSTRIAL WORK</i>	See <i>Nonresidential Functional Area or Type of Use</i> .
<i><u>PRESSURE BOUNDARY</u></i>	<i>is the primary air enclosure boundary separating indoor and outdoor air. For example, a volume that has more leakage to the outside than to the conditioned space would be considered outside the pressure boundary. Exposed earth in a crawlspace or basement shall not be considered part of the pressure boundary.</i>
<i>PRIMARY AIRFLOW</i>	is the airflow (cfm or L/s) supplied to the zone from the air-handling unit at which the outdoor air intake is located. It includes outdoor intake air and recirculated air from that air-handling unit but does not include air transferred or air recirculated to the zone by other means.

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Term	Definition
<u>PRIMARY STORAGE</u>	<u>is compressed air storage located between the compressors and any dryers or other conditioning equipment.</u>
PRINCIPAL VIEWING LOCATION	See <i>Outdoor Lighting</i> .
PRIVATE OFFICE OR WORK AREA	is an office bounded by 72-inches or higher permanent partitions and is no more than 200 ft². See <i>Nonresidential Functional Area or Type of Use</i> .
PROCESS	is an activity or treatment that is not related to the space conditioning, lighting, service water heating, or ventilating of a building as it relates to human occupancy.
PROCESS LOAD	is a load resulting from a process.
PROCESS SPACE	is a space that is thermostatically controlled to maintain a process environment temperature less than 55° F or to maintain a process environment temperature greater than 90° F for the whole space that the system serves, or that is a space with a space conditioning system designed and controlled to be incapable of operating at temperatures above 55° F or incapable of operating at temperatures below 90° F at design conditions.
<u>PROCESS, COVERED</u>	<u>are processes that are regulated under Part 6, which include datacom equipment, laboratory exhaust, garage exhaust, commercial kitchen ventilation, refrigerator warehouses, supermarket refrigeration systems, compressed air systems, process cooling towers, process boilers.</u>
<u>PROCESS, EXEMPT</u>	<u>is process that is not listed as a covered process.</u>
<u>PROCESS LOAD, COVERED</u>	<u>is a load resulting from a covered process</u>
<u>PROCESS LOAD, EXEMPT</u>	<u>is a load resulting from an exempt process.</u>
PROPOSED DESIGN	is the proposed building design which must comply with the standards before receiving a building permit. See also Energy Budget and Standard Design.
<u>PROPOSED DESIGN BUILDING</u>	<u>the proposed building being modeled using rules described in the Alternative Calculation Method Manual. In order for a building to comply with the standards, the proposed building energy use must be less than or equal to the Standard Design Building energy use and meet the mandatory requirements in the Title 24 Building Energy Efficiency Standards.</u>
PUBLIC ADVISER	is the Public Adviser of the Commission.
PUBLIC AREAS	are spaces generally open to the public at large, customers or congregation members, or similar spaces where occupants need to be prevented from controlling lights for safety, security, or business reasons.
PUBLIC MONUMENTS	See <i>Outdoor Lighting</i> .

Term	Definition
<u>R-VALUE</u>	<u>is the measure of the thermal resistance of insulation or any material or building component expressed in ft²-hr-oF/Btu.</u>
RADIANT BARRIER	is a highly reflective, low emitting material installed at the underside surface of the roof deck and the inside surface of gable ends or other exterior vertical surfaces in attics to reduce <u>the summer</u> solar heat gain <u>and the winter heat loss. into the attic.</u>
RAISED FLOOR	is a floor (partition) over a crawl space, or an unconditioned space, or ambient air.
READILY ACCESSIBLE	is capable of being reached quickly for operation, repair or inspection, without requiring climbing or removing obstacles, or resorting to access equipment.
REAR	See <i>Back</i> .
RECOOL	is the cooling of air that has been previously heated by space-conditioning equipment or systems serving the same building.
RECORD DRAWINGS	are drawings that document the as installed location and performance data on all lighting and space conditioning system components, devices, appliances and equipment, including but not limited to wiring sequences, control sequences, duct and pipe distribution system layout and sizes, space conditioning system terminal device layout and air flow rates, hydronic system and flow rates, and connections for the space conditioning system. Record drawings are sometimes called "as built."
RECOVERED ENERGY	is energy used in a building that (1) is recovered from space conditioning, service water heating, lighting, or process equipment after the energy has performed its original function; (2) provides space conditioning, service water heating, or lighting; and (3) would otherwise be wasted.
RECOVERY EFFICIENCY	is one measure of the efficiency of water heaters. It is required for water heating energy calculations for some types of water heaters. It is a measure of the percentage of heat from combustion of gas or oil which is transferred to the water. For non-storage type water heaters, the recovery efficiency is really a thermal efficiency.
REDUCED FLICKER OPERATION	is the operation of a light, in which the light has a visual flicker less than 30 percent, for frequency and modulation.
REFERENCE APPENDICES	is the support document for the Building Energy Efficiency Standards and the ACM Approval Manuals. The document consists of three sections: the Reference Joint Appendices (JA), the Reference Residential Appendices (RA), and the Reference Nonresidential Appendices (NA).

Term	Definition
REFERENCE COMPUTER PROGRAM	is the reference method against which other methods are compared. For the Nonresidential Standards, the reference computer program is DOE 2.1E. For the low-rise Residential Standards the reference computer program is CALRES.
REFLECTANCE, SOLAR	is the ratio of the reflected solar flux to the incident solar flux.
REFRIGERANT CHARGE	is to the amount of refrigerant that is installed or “charged” into an air conditioner or heat pump. The <i>refrigerant</i> is the working fluid. It is compressed and becomes a liquid as it enters the condenser. The hot liquid is cooled in the condenser and flows to the evaporator where it released through the expansion valve. When the pressure is released, the refrigerant expands into a gas and cools. Air is passed over the evaporator to provide the space cooling. When an air conditioner or heat pump has too much refrigerant (overcharged) the compressor may be damaged. When an air conditioner has too little refrigerant (undercharged), the efficiency of the unit is reduced. A <i>thermostatic expansion valve (TXV)</i> can mitigate the impact of improper refrigerant charge.
REFRIGERATED CASE	is a manufactured commercial refrigerator or freezer, including but not limited to display cases, reach-in cabinets, meat cases, and frozen food and soda fountain units.
REFRIGERATED SPACE	is a building or a space that is a refrigerated warehouse, walk-in cooler, or a freezer.
REFRIGERATED WAREHOUSE	is a building or a space constructed for storage of products, where mechanical refrigeration is used to maintain the space temperature at 55° F or less.
REGISTERED DOCUMENT	means the document has been submitted to a HERS provider <u>residential or nonresidential</u> data registry <u>for retention</u> , and the <u>data</u> registry has assigned a unique registration number to the document. The image of the registered document is accessible for printing or viewing to-by registered-authorized users of the provider's data registry via the <u>registration</u> provider's internet website. The <u>registered</u> document's unique <u>visible</u> registration number is embedded-appended onto the document image by the provider's data registry automated functions .

Term	Definition
<u>REGISTRATION PROVIDER</u>	<u>is an entity that has been approved by the Energy Commission or the Executive Director to provide data registry services. Registration Providers shall maintain data registries that conform to the requirements in Reference Joint Appendix JA7, and the specifications in the Data Registry Requirements Manual(s) approved by the Energy Commission. The Registration Provider for a Residential Data Registry shall be a HERS Provider approved by the Energy Commission.</u>
REHEAT	is the heating of air that has been previously cooled by cooling equipment or supplied by an economizer.
RELATIVE SOLAR HEAT GAIN	is the ratio of solar heat gain through a fenestration product (corrected for external shading) to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation, which is then reradiated, conducted, or convected into the space.
RELIGIOUS WORSHIP	See <i>Nonresidential Functional Area or Type of Use</i> .
RELOCATABLE PUBLIC SCHOOL BUILDING	is a relocatable building as defined by Title 24, Part 1, Section 4-314, which is subject to Title 24, Part 1, Chapter 4, Group 1.
REPAIR	is the reconstruction or renewal for the purpose of maintenance of any component, system, or equipment of an existing building. Replacement of any component, system, or equipment for which there are requirements in the standards is considered an alteration and not a repair.

Term	Definition
<u>REPLACEMENT AIR</u>	<p>is outdoor air that is used to replace air removed from a building through an exhaust system. Replacement air may be derived from one or more of the following: makeup air, supply air, transfer air, and infiltration. However, the ultimate source of all replacement air is outdoor air. When replacement air exceeds exhaust, the result is exfiltration.</p> <p>MAKEUP AIR is dedicated replacement air deliberately brought into the building from the outdoors and supplied to the vicinity of an exhaust hood to replace the air and cooking effluent being exhausted. Makeup air is generally filtered and fan-forced, and it may be heated or cooled depending on the requirements of the application. Makeup air may be delivered through outlets integral to the exhaust hood (compensating hoods) or through outlets in the same room.</p> <p>SUPPLY AIR is air entering a space from an air-conditioning, heating, or ventilating system for the purpose of comfort conditioning. Supply air is generally filtered, fan-forced, and heated, cooled, humidified or dehumidified as necessary to maintain specified temperature and humidity conditions. Only the quantity of outdoor air within the supply airflow is used as replacement air.</p> <p>TRANSFER AIR is air transferred from one room to another through openings in the room envelope, whether it is transferred intentionally or not. The driving force for transfer air is generally a small pressure differential between the rooms, although one or more fans may be used.</p> <p>INFILTRATION is leakage or flow of outdoor air into the building or space through openings in the building or space envelope, whether intentional or unintentional. The driving force for infiltration is a negative pressure in a space or building relative to the exterior of the building envelope.</p>
RESIDENTIAL BUILDING	See “high-rise residential building” and “low-rise residential building.”
RESIDENTIAL COMPLIANCE MANUAL	is the manual developed by the commission, under Section 25402.1 of the Public Resources Code, to aid designers, builders, and contractors in meeting energy efficiency standards for low-rise residential buildings.
RESIDENTIAL SPACE TYPE	<p>is one of the following:</p> <p>Bathroom is a room or area containing a sink used for personal hygiene, toilet, shower, or a tub.</p> <p>Closet is a non-habitable room used for the storage of linens, household supplies, clothing, non-perishable</p>

Term	Definition
	<p>food, or similar uses, and which is not a hallway or passageway.</p> <p>Garage is a non-habitable building or portion of building, attached to or detached from a residential dwelling unit, in which motor vehicles are parked.</p> <p>Kitchen is a room or area used for cooking, food storage and preparation and washing dishes, including associated counter tops and cabinets, refrigerator, stove, ovens, and floor area.</p> <p>Laundry is a non-habitable room or space which contains plumbing and electrical connections for a washing machine or clothes dryer.</p> <p>Storage Building is a non-habitable detached building used for the storage of tools, garden equipment, or miscellaneous items.</p> <p>Utility Room is a non-habitable room or building which contains only HVAC, plumbing, or electrical controls or equipment; and which is not a bathroom, closet, garage, or laundry room.</p>
RESTAURANT	See <i>Nonresidential Functional Area or Type of Use</i> .
RESTROOM	See <i>Nonresidential Functional Area or Type of Use</i> .
RETAIL MERCHANDISE SALES	See <i>Nonresidential Functional Area or Type of Use</i> .
RIGHT SIDE	is the right side of the building as one faces the front facade from the outside (see <i>Front</i>). This designation is used to indicate the orientation of fenestration and other surfaces, especially in model homes that are constructed in multiple orientations.
ROOF	is the outside cover of a building or structure including the structural supports, decking, and top layer that is exposed to the outside with a slope less than 60 degrees from the horizontal.
ROOF, LOW-SLOPED	is a roof that has a ratio of rise to run of 2:12 or less (9.5 degrees from the horizontal).
ROOF, STEEP-SLOPED	is a roof that has a ratio of rise to run of greater than 2:12 (9.5 degrees from the horizontal).
<u>ROOF RECOVER BOARD</u>	<u>is a rigid type board, typically 1/4 inch to 3/4 inch thick, installed directly below a low-sloped roof membrane, with or without above deck thermal insulation, to improve a roof system's compressive strength or to physically separate the roof membrane from the thermal insulation or to physically separate a new roof covering from an underlying roof membrane as part of a roof overlay project.</u>
ROOFING PRODUCT	is the top layer(s) of the roof that is exposed to the outside, which has properties including but not limited to <u>solar</u> reflectance, <u>thermal</u> emittance, and mass.
RUNOUT	is piping that is no more than 12 feet long and that connects to a fixture or an individual terminal unit.

Term	Definition
R-VALUE	is the measure of the thermal resistance of insulation or any material or building component expressed in (ft ² -hr °F)/Btu. See <i>Thermal Resistance</i> .
SALES CANOPY	See <i>Outdoor Lighting</i> .
<u>SATURATED CONDENSING TEMPERATURE (CONDENSING TEMPERATURE)</u>	<u>is the saturation temperature corresponding to the refrigerant pressure at the condenser entrance for single component and azeotropic refrigerants. For zeotropic refrigerants, the arithmetic average of the Dew Point and Bubble Point temperatures corresponding to the refrigerant pressure at the condenser entrance.</u>
SC	See <i>Shading Coefficient</i> .
SCHOOL	See <i>Nonresidential Functional Area or Type of Use</i> .
SCIENTIFIC EQUIPMENT	is measurement, testing or metering equipment used for scientific research or investigation, including but not limited to manufactured cabinets, carts and racks.
SCONCE	is a wall mounted ornamental luminaire.
SEASONAL ENERGY EFFICIENCY RATIO (SEER)	is the total cooling output of an air conditioner in Btu during its normal usage period for cooling divided by the total electrical energy input in watt-hours during the same period, as determined using the applicable test method in the Appliance Efficiency Regulations.
SENIOR HOUSING	See <i>Nonresidential Functional Area or Type of Use</i> .
SERIES FAN-POWERED TERMINAL UNIT	is a terminal unit that combines a VAV damper in series with a downstream fan which runs at all times that the terminal unit is supplying air to the space.
SERVICE WATER HEATING	is heating of water for sanitary purposes for human occupancy, other than for comfort heating.
SHADING	is the protection from heat gains because of direct solar radiation by permanently attached exterior devices or building elements, interior shading devices, glazing material, or adherent materials.
SHADING COEFFICIENT (SC)	is the ratio of the solar heat gain through a fenestration product to the solar heat gain through an unshaded 1/8-inch-thick clear double strength glass under the same set of conditions. For nonresidential, high-rise residential, and hotel/motel buildings, this shall exclude the effects of mullions, frames, sashes, and interior and exterior shading devices.
<u>SHOWER HEAD</u>	<u>is a fixture for directing the spray of water in a shower. A shower head may incorporate one or more sprays, nozzles or openings. All components that are supplied standard together and function from one inlet (i.e., after the mixing valve) form a single shower head.</u>

Term	Definition
<i>SIDE FINS</i>	are vertical shading elements mounted on either side of a glazed opening that can protect the glazing from lateral low angle sun penetration.
<i>SIGN</i>	<p>definitions include the following:</p> <p>Electronic Message Center (EMC) is a pixilated image producing electronically controlled sign formed by any light source. Bare lamps used to create linear lighting animation sequences through the use of chaser circuits, also known as “chaser lights” are not consider an EMC.</p> <p>Illuminated face is a side of a sign that has the message on it. For an exit sign it is the side that has the word “EXIT” on it.</p> <p>Sign, cabinet is an internally illuminated sign consisting of frame and face(s), with a continuous translucent message panel, also referred to as a panel sign</p> <p>Sign, channel letter is an internally illuminated sign with multiple components, each built in the shape of an individual three dimensional letters or symbol that are each independently illuminated, with a separate translucent panel over the light source for each element.</p> <p>Sign, double-faced is a sign with two parallel opposing faces.</p> <p>Sign, externally illuminated is any sign or a billboard that is lit by a light source that is external to the sign directed towards and shining on the face of the sign.</p> <p>Sign, internally illuminated is a sign that is illuminated by a light source that is contained inside the sign where the message area is luminous, including cabinet signs and channel letter signs.</p> <p>Sign, traffic is a sign for traffic direction, warning, and roadway identification.</p> <p>Sign, unfiltered is a sign where the viewer perceives the light source directly as the message, without any colored filter between the viewer and the light source, including neon, cold cathode, and LED signs.</p>
<i>SINGLE PACKAGE VERTICAL AIR CONDITIONER (SPVAC)</i>	is a type of air-cooled small or large commercial package air-conditioning and heating equipment; factory assembled as a single package having its major components arranged vertically, which is an encased combination of cooling and optional heating components; is intended for exterior mounting on, adjacent interior to, or through an outside wall; and is powered by single or three-phase current. It may contain separate indoor grille(s), outdoor louvers, various ventilation options, indoor free air discharge, ductwork, wall plenum, or sleeve. Heating components may include electrical resistance, steam, hot water, gas, or no heat but may not include reverse cycle refrigeration as a heating means.

Term	Definition
<i>SINGLE PACKAGE VERTICAL HEAT PUMP (SPVHP)</i>	is an SPVAC that utilizes reverse cycle refrigeration as its primary heat source, with secondary supplemental heating by means of electrical resistance, steam, hot water, or gas. [I]
<i>SINGLE ZONE</i>	is an HVAC system with a supply fan (and optionally a return fan) and heating and/or cooling heat exchangers (e.g. DX coil, chilled water coil, hot water coil, furnace, electric heater) that serves a single thermostatic zone. This system may or may not be constant volume.
<i>SITE SOLAR ENERGY</i>	is thermal, chemical, or electrical energy derived from direct conversion of incident solar radiation at the building site.
<i>SITE-BUILT FENESTRATION</i>	is fenestration designed to be field-glazed or field assembled units using specific factory cut or otherwise factory formed framing and glazing units that are manufactured with the intention of being assembled at the construction site and are provided with an NFRC label certificate for site-built fenestration. Examples of site-built fenestration include storefront systems, curtain walls, and atrium roof systems.
<i>SKYLIGHT</i>	is fenestration installed on a roof less than 60 degrees from the horizontal.
<i>SKYLIGHT AREA</i>	is the area of the rough opening for the skylight.
<i>SKYLIGHT TYPE</i>	is one of the following three types of skylights: glass mounted on a curb, glass not mounted on a curb or plastic (assumed to be mounted on a curb).
<i>SLAB-ON-GRADE</i>	is an exterior concrete floor in direct contact with the earth below the building.
<i>SMACNA</i>	is the Sheet Metal and Air-conditioning Contractors National Association.
<i>SMACNA RESIDENTIAL COMFORT SYSTEM INSTALLATION STANDARDS MANUAL</i>	is the Sheet Metal Contractors' National Association document entitled "Residential Comfort System Installation Standards Manual, Seventh Edition." (1998).
<i>SOCIAL SERVICES BUILDING</i>	is a space where public assistance and social services are provided to individuals or families.
<i>SOFT COAT</i>	is a low emissivity metallic coating applied to glass, which will be installed in a fenestration product through a sputter process where molecules of metals such as stainless steel or titanium are sputtered onto the surface of glass. Soft coats generally have lower emissivity than hard coats.
<i>SOLAR HEAT GAIN COEFFICIENT (SHGC)</i>	is the ratio of the solar heat gain entering the space through the fenestration area to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation, which is then reradiated, conducted, or convected into the space.

Term	Definition
SOLAR HEAT GAIN COEFFICIENT, CENTER OF GLAZING (SHGC_G)	is the SHGC for the center of glazing area.
SOLAR HEAT GAIN COEFFICIENT, TOTAL FENESTRATION PRODUCT (SHGC OR SHGC_T)	is the SHGC for the total fenestration product.
SOLAR REFLECTANCE	See <i>Reflectance</i> .
SOLAR REFLECTANCE INDEX (SRI)	is a measure of the roof's ability to reject solar heat which includes both reflectance and emittance.
<u>SOLAR ZONE</u>	<u>is a section of the roof designated and reserved for the future installation of a solar electric or solar thermal system.</u>
SOUTH-FACING	See <i>Orientation</i> .
SPA	is a vessel that contains heated water in which humans can immerse themselves, is not a pool, and is not a bathtub.
SPACE-CONDITIONING SYSTEM	<p>is a system that <u>provides heating, ventilating, or cooling within or associated with conditioned spaces in a building, and may consist of but not limited to incorporate use of components such as chillers/compressors, distribution systems (air ducts, water piping, refrigerant piping), pumps, air handlers, unit, cooling and heating coils, air and/or -water cooled condensers, economizers, terminal units, and associated controls, and the air distribution system, which provide either collectively or individually heating, ventilating, or cooling within or associated with conditioned spaces in a building.</u></p> <p><u>New or Replacement Space Conditioning Systems</u> for alterations to dwelling units include all of the <u>system heating/cooling equipment (e.g. condensing unit(s) and cooling or heating coil(s) for split systems; or complete replacement of a package unit); and an entirely new or replacement duct system (see definition); and an entirely new or replacement air handler.</u></p>
SPACER, ALUMINUM	is a metal channel that is used either against the glass (sealed along the outside edge of the insulated glass unit), or separated from the glass by one or more beads of caulk, which is used to separate panes of glass in an insulated glass unit.
SPACER, INSULATING	is a non-metallic, relatively non-conductive material, usually of rubber compounds, that is used to separate panes of glass in an insulated glass unit.
SPACER, OTHER	is a wood, fiberglass, or composite material that is used as a spacer between panes of glass in insulated glass units.
SPACER, SQUIGGLE	is a flexible material, usually butyl, formed around a thin corrugated aluminum strip that is used as a spacer in insulated glass units.

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Term	Definition
SPECIFIC HEAT	is the quantity of heat that must be added to a unit mass of a material to increase its temperature by one degree. Typical units are Btu/°F-lb.
SPLIT SYSTEM AIR CONDITIONER OR HEAT PUMP	is an air conditioner or heat pump that has physically separate condenser and air handling units that work together as a single cooling system.
STAIRS, ACTIVE / INACTIVE	See <i>Nonresidential Functional Area or Type of Use</i> .
STANDARD DESIGN	is a hypothetical building that is used to calculate the custom budget for nonresidential and residential buildings. A new building or addition alone complies with the standards if the predicted source energy use of the proposed design is the same or less than the annual budget for space conditioning and water heating of the Standard Design. The Standard Design is substantially similar to the Proposed Design, except it is in exact compliance with the prescriptive requirements and the mandatory measures.
<u>STANDARD DESIGN BUILDING</u>	<u>is derived from a proposed building using the modeling rules described in the Alternative Calculation Method Manual and by meeting the mandatory and prescriptive requirements in the Title 24 Building Energy Efficiency Standards. In order for a building to comply with the standards, the proposed building energy use must be less than or equal to the Standard Design Building energy use.</u>
STANDARDS	See <i>Building Energy Efficiency Standards</i> .
STANDBY LOSS, BTU/HR	is the heat lost per hour from the stored water above room temperature. It is one of the measures of efficiency of water heaters required for water heating energy calculations for some types of water heaters. This standby loss is expressed as Btu/hr.
STANDBY LOSS, PERCENT	is the ratio of heat lost per hour to the heat content of the stored water above room temperature. It is one of the measures of efficiency of water heaters required for water heating energy calculations for some types of water heaters. Standby loss is expressed as a percentage.
STEPPED DIMMING	See <i>Dimming, Stepped</i> .
STEPPED SWITCHING	is a lighting control method that varies the light output of a lighting system with the intent of maintaining approximately the relative uniformity of illumination by turning off alternate groups of lamps or luminaires.
STORAGE, COLD	is a storage area within a refrigerated warehouse where space temperatures are maintained at or above 32° F.
STORAGE, COOL	is a storage area within a refrigerated warehouse where space temperatures are maintained between 32° F and 55° F.

Term	Definition
STORAGE, FROZEN	is a storage area within a refrigerated warehouse where the space temperatures are maintained below 32° F.
SUBORDINATE OCCUPANCY	is any occupancy type, in mixed occupancy buildings, that is not the dominant occupancy. <i>See Dominant Occupancy, Mixed Occupancy.</i>
SUCTION LINE	is the refrigerant line that leads from the evaporator to the condenser in a split system air conditioner or heat pump. This line is insulated since it carries refrigerant at a low temperature.
SUPPORT AREA	<i>See Nonresidential Functional Area or Type of Use.</i>
SUSPENDED FILMS	are low-e coated plastic films stretched between the elements of the spacers between panes of glazing; acts as a reflector to slow the loss of heat from the interior to the exterior.
SYSTEM	is a combination of equipment, controls, accessories, interconnecting means, or terminal elements by which energy is transformed to perform a specific function, such as space conditioning, service water heating, or lighting.
TASK LIGHTING	is lighting that is designed specifically to illuminate a task location, and that is generally confined to the task location.
TDV ENERGY	<i>See Time Dependent Valuation (TDV) Energy.</i>
TEMPORARY LIGHTING	is a lighting installation with plug-in connections that does not persist beyond 60 consecutive days or more than 120 days per year.
TENANT LEASE SPACE	<i>See Nonresidential Functional Area or Type of Use.</i>
TENANT SPACE	is a portion of a building intended for occupancy by a single tenant.
THEATER, MOTION PICTURE	<i>See Nonresidential Functional Area or Type of Use.</i>
THEATER, PERFORMANCE	<i>See Nonresidential Functional Area or Type of Use.</i>
THERMAL BREAK WINDOW FRAME	is metal fenestration frames that are not solid metal from the inside to the outside, but are separated in the middle by a material, usually urethane, with a lower conductivity.
THERMAL CONDUCTIVITY	is the quantity of heat that will flow through a unit area of the material per hour when the temperature difference through the material is one degree.
THERMAL EMITTANCE	<i>See Emittance, Thermal.</i>
THERMAL MASS	is solid or liquid material used to store heat for later heating use or for reducing cooling requirements.
THERMAL RESISTANCE (R)	is the resistance of a material or building component to the passage of heat in (hr. x ft. ² x °F)/Btu.

Term	Definition
THERMOSTATIC EXPANSION VALVE (TXV)	is a refrigerant metering valve, installed in an air conditioner or heat pump, which controls the flow of liquid refrigerant entering the evaporator in response to the superheat of the gas leaving it.
THROW DISTANCE	is the distance between the luminaire and the center of the plane lit by the luminaire on a display.
TIME DEPENDENT VALUATION (TDV) ENERGY	is the time varying energy caused to be used by the building to provide space conditioning and water heating and for specified buildings lighting. TDV energy accounts for the energy used at the building site and consumed in producing and in delivering energy to a site, including, but not limited to, power generation, transmission and distribution losses.
TITLE 24	is all of the building standards and associated administrative regulations published in Title 24 of the <i>California Code of Regulations</i> . The <i>Building Energy Efficiency Standards</i> are contained in Part 6. Part 1 contains the administrative regulations for the building standards.
<u>TOTAL HEAT OF REJECTION (THR)</u>	<u>is the heat absorbed at the evaporator plus the heat picked up in the suction line plus the heat added to the refrigerant in the compressor.</u>
TRAFFIC SIGN	See <i>Sign</i> .
<u>TRANSFER AIR</u>	<u>is air transferred from one room to another through openings in the room envelope, whether it is transferred intentionally or not. The driving force for transfer air is generally a small pressure differential between the rooms, although one or more fans may be used.</u>
<u>TRIM COMPRESSOR</u>	<u>is a compressor that is designated for part-load operation, handling the short term variable trim load of end uses, in addition to the fully loaded base compressors.</u>
<u>U-FACTOR, CENTER OF GLAZING (U_c)</u>	<u>is the U-factor for the center of glazing area</u>
<u>U-FACTOR, ENVELOPE</u>	is the overall coefficient of thermal transmittance of a construction assembly, in Btu/(hr. x ft. ² x °F), including air film resistance at both surfaces.
<u>U-FACTOR, TOTAL FENESTRATION PRODUCT (U_t)</u>	<u>is the U-factor for the total fenestration product.</u>
<u>U-FACTOR, CENTER OF GLAZING (U-FACTOR_c)</u>	<u>is the U-Factor for the center of glazing area.</u>
<u>U-FACTOR, TOTAL FENESTRATION PRODUCT (U-FACTOR OR U-FACTOR_T)</u>	<u>is U-Factor for the total fenestration product.</u>
UIMC	See <i>Unit Interior Mass Capacity</i> .
UL	is the Underwriters Laboratories.
UL 1574	is the Underwriters Laboratories document entitled "Track Lighting Systems,," 2000.
UL 1598	is the Underwriters Laboratories document entitled "Standard for Luminaires," 2000.

Term	Definition
<i>UL 181</i>	is the Underwriters Laboratories document entitled "Standard for Factory-Made Air Ducts and Air Connectors," 1996.
<i>UL 181A</i>	is the Underwriters Laboratories document entitled "Standard for Closure Systems for Use With Rigid Air Ducts and Air Connectors," 1994.
<i>UL 181B</i>	is the Underwriters Laboratories document entitled "Standard for Closure Systems for Use With Flexible Air Ducts and Air Connectors," 1995.
<i>UL 723</i>	is the Underwriters Laboratories document entitled "Standard for Test for Surface Burning Characteristics of Building Materials," 1996.
<i>UL 727</i>	is the Underwriters Laboratories document entitled "Standard for Oil-Fired Central Furnaces," 1994.
<i>UL 731</i>	is the Underwriters Laboratories document entitled "Standard for Oil-Fired Unit Heaters," 1995.
<i>UL 2108</i>	is the Underwriters Laboratories document entitled "Low Voltage Lighting Systems," 2008.
<i>UL DATA ACCEPTANCE PROGRAM (DAP)</i>	is an Underwriters Laboratory program that utilizes work conducted by a client as well as third-party test facilities in accordance with national and international accreditation criteria to facilitate the conduct of investigations of products. Among the types UL uses are Witnessed Test Data Program (WTDP) where UL witnesses the tests being conducted, Client Test Data Program (CTDP) which is where the client conducts the test and submits the data for UL review, and Third Party Test Data Program (TPTDP) where testing is conducted by another testing organization for clients and submitted to UL for review.
<i>UL®</i>	is the Underwriters Laboratories.
<i>UNCONDITIONED SPACE</i>	is enclosed space within a building that is not directly conditioned, or indirectly conditioned.
<i>UNFILTERED SIGN</i>	See <i>Sign</i> .
<i>UNIT INTERIOR MASS CAPACITY (UIMC)</i>	is the amount of effective heat capacity per unit of thermal mass, taking into account the type of mass material, thickness, specific heat, density and surface area.
<i>U-VALUE</i>	See <i>U-factor</i> .
<i>VACANCY SENSOR, LIGHTING</i>	is an occupant sensor for which the lights must be manually turned on but the sensor automatically turns the lights off soon after an area is vacated. The device also may be called a manual-on occupant sensor.
<i>VAPOR BARRIER</i>	is a material that has a permance of one perm or less and that provides resistance to the transmission of water vapor.

Term	Definition
<u>VAPOR RETARDER CLASS</u>	<p>is a measure of the ability of a material or assembly to limit the amount of moisture that passes through the material or assembly. Vapor retarder class shall be defined using the desiccant method with Procedure A of ASTM E96 as follows:</p> <p>Class I: 0.1 perm or less</p> <p>Class II: $0.1 < \text{perm} < 1.0$ perm</p> <p>Class III: $1.0 < \text{perm} < 10$ perm</p>
VARIABLE AIR VOLUME (VAV) SYSTEM	is a space-conditioning system that maintains comfort levels by varying the volume of supply air to the zones served.
VEHICLE SERVICE STATION CANOPY	See <i>Outdoor Lighting</i> .
VENDING MACHINE	is a machine for vending and dispensing refrigerated or non-refrigerated food and beverages or general merchandise.
VENTILATION AIR	<p>is that portion of supply air which comes from outside plus any recirculated air that has been treated to maintain the desired quality of air within a designated space.</p> <p>See also <i>Outside Air</i>.</p>
VERTICAL GLAZING	See <i>Window</i> .
VERY VALUABLE MERCHANDISE	is rare or precious objects, including, but not limited to, jewelry, coins, small art objects, crystal, ceramics, or silver, the selling of which involves customer inspection of very fine detail from outside of a locked case.
VINYL WINDOW FRAME	is a fenestration frame constructed with a polyvinyl chloride (PVC) which has a lower conductivity than metal and a similar conductivity to wood.
VISIBLE TRANSMITTANCE (VT)	is the ratio (expressed as a decimal) of visible light that is transmitted through a glazing to the light that strikes the material.
VISIBLE TRANSMITTANCE, CENTER OF GLAZING (VT_c)	is the VT for the center of glazing area.
VISIBLE TRANSMITTANCE, TOTAL FENESTRATION PRODUCT (VT OR VT_T)	is the VT for the total fenestration product.
VOCATIONAL ROOM	See <i>Nonresidential Functional Area or Type of Use</i> .
WAITING AREA	See <i>Nonresidential Functional Area or Type of Use</i> .
WALL TYPE	is a type of wall assembly having a specific heat capacity, framing type, and U-factor.
WEATHERSTRIPPING	<p>is a specially designed strip, seal or gasket attached to doors and windows to prevent infiltration and exfiltration through cracks around the openings. Weatherstripping is one of the mandatory requirements for all new residential construction.</p> <p>See <i>Infiltration, Exfiltration</i>.</p>

Term	Definition
<i>WEIGHTED AVERAGING</i>	is an arithmetic technique for determining an average of differing values for the members of a set by weighting each value by the extent to which the value occurs. In some cases when two or more types of a building feature, material or construction assembly occur in a building, a weighted average of the different types may be sufficiently accurate to represent the energy impact of each type considered separately.
<i>WEST-FACING</i>	See <i>Orientation</i> .
<i>WHOLESALE SHOWROOM</i>	See <i>Nonresidential Functional Area or Type of Use</i> .
<i>WINDOW</i>	is fenestration that is not a skylight.
<i>WINDOW AREA</i>	is the area of the surface of a window, plus the area of the frame, sash, and mullions.
<i>WINDOW TYPE</i>	is a window assembly having a specific solar heat gain coefficient, relative solar heat gain, and U-factor.
<i>WINDOW WALL RATIO</i>	is the ratio of the window area to the gross exterior wall area.
<i>WOOD HEATER</i>	is an enclosed wood-burning appliance used for space heating and/or domestic water heating.
<i>WOOD STOVE</i>	See <i>Wood Heater</i> .
<i>ZONAL CONTROL</i>	is the practice of dividing a residence into separately controlled HVAC zones. This may be done by installing multiple HVAC systems that condition a specific part of the building, or by installing one HVAC system with a specially designed distribution system that permits zonal control. The Energy Commission has approved an alternative calculation method for analyzing the energy impact of zonally controlled space heating and cooling systems. To qualify for compliance credit for zonal control, specific eligibility criteria specified in the Residential ACM Manual must be met.
<i>ZONE, CRITICAL</i>	is a zone serving a process where reset of the zone temperature setpoint during a demand shed event might disrupt the process, including but not limited to data centers, telecom and private branch exchange (PBX) rooms, and laboratories.
<i>ZONE, NON-CRITICAL</i>	is a zone that is not a critical zone.
<i>ZONE, SPACE-CONDITIONING</i>	is a space or group of spaces within a building with sufficiently similar comfort conditioning requirements so that comfort conditions, as specified in §140.4(b)3 or §150.0(h), as applicable, can be maintained throughout the zone by a single controlling device.

ⁱ Definitions taken from the 2006 ICB.